



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

1914
4/1

Keep sep

THE
"LLOYD" GUIDE
TO
AUSTRALASIA,
ILLUSTRATED.

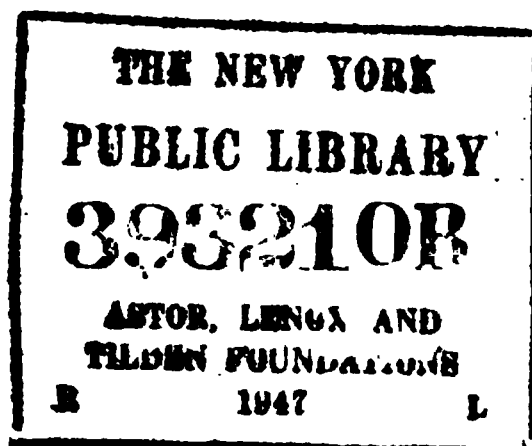


EDITED BY
A. G. PLATE.

FOR
THE NORDDEUTSCHER LLOYD,
BREMEN.



LONDON: EDWARD STANFORD,
12, 13, & 14, Long Acre, W. C.
1906.



PREFACE.

The increasing popularity of the Australian lines of steamers as regards tourist traffic, has created the want of a compact handbook on Australasia, such as would give, in a brief form, information on all topics likely to be of interest to the traveller; and the Norddeutscher Lloyd, in compliance with repeated requests from many of its clients, have endeavoured to meet this want by the present publication. The book is of course chiefly designed for travellers foreign to Australasia, though it is confidently expected that it will also prove useful to residents of the countries of which it treats. In the compilation of the general descriptive matter only the best sources have been consulted, while the statistics are also taken from the latest official publications; and no effort has been spared to make the book in every way thoroughly reliable. Special attention has been devoted to the requirements of the tourist, and all the principal sights and excursions have been described from personal observation. The maps also have been specially compiled for the book, and the latest railway lines etc. have been added.

With the recent inauguration of a new passenger service connecting the East with the Australian continent, the Norddeutscher Lloyd have established a circuit, enabling the round-the-world traveller, who would perhaps otherwise have omitted a visit to Australia, to include this most interesting part of the globe in his itinerary, affording at the same time an opportunity of seeing some of the most magnificent South Sea Island scenery and native life. The line of steamers, which starts from Yokohama, calls en route at the principal ports of Japan, China, the Phillipines, New Guinea, New Britain and Queensland; with Sydney, where it connects with the homeward bound mail steamers, as its terminal port.

For information curteously supplied in connection with the work, and for permission to reproduce photographs, the editor's thanks are due to the Government Tourist Department of New Zealand, the Tasmanian Tourist Association, and the Caves Board of Western Australia, as well as to the High Commissioner for New Zealand, the Agents General for the different States of the Commonwealth, and the Railway Commissioners of Western Australia, South Australia, Victoria, and Queensland.

BREMEN, May 1., 1906.

Whitely
September 14, 1946

gurat-
bours
tain,
re its
v the

THE AUSTRALIAN CONTINENT

AREA AND BOUNDARIES

The Continent of Australia which lies wholly in the Southern Hemisphere, its most northerly point being Cape York and its most southern point being the point of Tasmanian Peninsula, is 1,971 miles long from north to south, as it is politically a single entity. Its limit is extended to the east from the mainland by the Tasmanian Sea to 153° 16' E. and 153° 16' E. The continent has few gulfs, the principal being the Gulf of Carpentaria in the north, and the Gulf of St. Vincent, Port Phillip and the Bass Strait on the south coast boast of several gulfs. The continent measures 8,850 miles in circumference, and at 2,946,691 square miles, the acreage represents 1,885,832,240 acres and 1,422,240,000,000 square feet. Politically Australia is divided into six States, New South Wales, Victoria, Queensland, Western Australia with Tasmania, and the Northern Territory. Western Australia is the largest, and Queensland next in the order of size, followed by New South Wales and Victoria, Tasmania and the Northern Territory of the six States of the Commonwealth.

s of
The
qual
the
tern
are
her
ria,
part
are
re,
ies
x-
nd
ly
to

r-
es
is
y
e
f
t
f
t

PHYSICAL FEATURES

As regards its configuration, Australia is a country of tablelands. Down the eastern coast, practically for its whole length, runs a main dividing range, never very lofty, the highest peaks being Mount Kosciusko and Mount Townsend in the eastern corner of New South Wales. The range runs out into spurs and offshoots in different parts, approaching right on to the coast and at others receding therefrom, leaving a broad coastal belt of excellent agricultural land.

THE AUSTRALIAN COMMONWEALTH.

AREA AND BOUNDARIES.

The Continent of Australia is the only one of the six which lies wholly to the southward of the equator. Its most northerly point on the mainland is in latitude $10^{\circ} 39' S.$ and its most southerly $39^{\circ} 11\frac{1}{2}' S.$, with "greatest" breadth of 1,971 miles. If Tasmania be considered geographically, as it is politically, a part of Australia, then the southermost limit is extended to $43^{\circ} 39' S.$, the island being separated from the mainland by the 150 miles of Bass Straits. From east to west, Australia lies between the meridians of $113^{\circ} 5' E.$ and $153^{\circ} 16' E.$, its greatest length being 2,400 miles. The continent has few great indentations round its shores, the principal being the Gulf of Carpentaria and Cambridge Gulf in the north, and the Gulfs of St. Vincent, Spencer Gulf and Port Phillip on the south. The east and west coast boast of several splendid harbours, and the coast line measures 8,850 miles. The area of Australia is computed at 2,946,691 square miles, or with Tasmania 2,972,906 square miles, the acreage represented in these two totals being 1,885,882,240 acres and 1,902,660,240 acres respectively. Politically Australia is divided into five states namely, New South Wales, Victoria, Queensland, South Australia and Western Australia with Tasmania as the Island State. In size Western Australia is the largest, with South Australia and Queensland next in the order named. Then come New South Wales and Victoria, Tasmania being the least in area of the six States of the Commonwealth.

PHYSICAL FEATURES.

As regards its configuration, Australia may be described as a country of tablelands. Down the eastern side of the continent, practically for its whole length, runs the cordillera or main dividing range, never very lofty, its highest peaks being Mount Kosciusko and Mount Townsend, in the south eastern corner of New South Wales. The range branches out into spurs and offshoots in different parts, sometimes approaching right on to the coast and at others receding therefrom, leaving a broad coastal belt of excellent agricul-

tural land. To seaward the range is steep in some cases, such as the Blue Mountains rising perpendicularly into precipitous sandstone cliffs two to three thousand feet high. East of the dividing range the land drops gradually to the sea level, sometimes undulating, sometimes spreading out into plain or scrub lands and river flats where some of the finest agricultural land of the continent is to be found. On the east side of the cordillera the rivers, though numerous, are not lengthy. Many of them are navigable for greater or less distances, but the presence of a bar at the mouth of most, renders them unfit for the harbouring of the larger class of vessels. To the southward, in Victoria, the range spreads out into a succession of mountain chains, reappearing again in Tasmania, a great part of which island is very hilly though the mountains do not exceed 5,000 feet in height. From the crest of the dividing range the land slopes gradually away westward to the great central plain of the interior, where the true desert country, unfit for any description of occupation is to be found. It is, however, incorrect to say, as the text books often aver, that the whole interior of Australia is a desert. In some localities it is undoubtedly so, but even now much of the land pronounced unprolific by the early explorers, supports a number of pastoralists. This great western slope of the main range is the watershed for the most important river system of Australia, the course of the streams such as the Murray, Darling, Lachlan, and Murrumbidgee in New South Wales, the Warrego, Barcoo, and Cooper's Creek in Queensland being far longer than those on the other side. These rivers all flow in a westerly direction, some of them being tributaries of the Murray, the most important of them entering the sea at the south eastern corner of South Australia, while others lose themselves in the interior.

On the western side of the central depression the land rises again in a succession of tablelands which extend to the coast line of Western Australia, where the country is broken up into low ranges of hills. This part has even now not been fully explored, but has been crossed in all directions by expeditions which have demonstrated that it possesses no real river system. In the south western corner of the continent the ranges carry remarkable forests, and at their base good agricultural land is to be found, while the north western districts sink to the sea level in a series of terraces, the poorest of which is that immediately abutting the sea. In the far north, or the Northern Territory as it is called, tropical characteristics, scrubs, forest land and good pastoral country prevail.

Tasmania differs widely from Australia in its configuration. A broken coast line pierced by fiords and harbours and guarded by bold cliffs, an interior of cliff and mountain, lake and forest, highly and pleasantly watered, are its chief characteristics, much appreciated, be it said, by the Australian in search of a summer resort.

CLIMATE AND RAINFALL.

With so extensive a range of latitude it follows of course that Australia enjoys a great variety of climate. The tropic of Capricorn divides the continent into two unequal portions, the northern comprising half Queensland, the Northern Territory of South Australia, and the North Western divisions of Western Australia and measuring 1,145,000 square miles in area, while the southern part contains the other half of Queensland, the whole of New South Wales, Victoria, South Australia proper, Tasmania, and a considerable part of West Australia, with an area altogether of 1,932,000 square miles. Considering the nationality of the colonists therefore, it is not surprising that the concentration of population lies to the southward. In the tropics, settlement is slow to expand, and although the coastal districts of Queensland and of Western Australia are gradually becoming more thickly settled, the back-country of these regions cannot be said to be adequately populated.

Although the interior displays the customary characteristics of a continental climate with sharply defined extremes of heat and cold, it is generally conceded that taken as a whole, the climate of Australia compares most favourably with that of countries in corresponding latitudes in the northern hemisphere. On the eastern side, the altitude of the main range though not extraordinary, brings about the presence of a distinct climatic region with a range of temperature and a general salubrity that Europeans find especially invigorating. In the high lands of the Australian Alps, summer and winter are strongly marked, the latter with snow and ice, while the rugged mountain lands of Victoria and of Tasmania present quite a European type of climate. In the north of the continent of course tropical conditions prevail, and in many parts the climate is very trying, although residents there, in time, are able to adapt themselves to it and live in comparative comfort.

The rainfall of Australia is as varied as its climate. In the North coast districts of Queensland, the Northern Territory of South Australia, and North West Australia

within the tropical belt, the annual rainfall is very heavy, averaging from 40 to 70 inches. The coast line generally is very well served as regards rain, and to the east of the main range the seasons are well marked and can usually be depended upon.

Across the range however things are different, and the average yearly rainfall in some parts of the interior does not amount to 20 inches. Indeed, 1,219,000 square miles of the continent's area receive less than 10 inches of rain every year, and two thirds of the total area of the mainland receives less than 20 inches. But so prolific is the soil in some localities that this fall is ample for requirements. Only 118,100 square miles receive over 50 inches in Australia, while no part of Tasmania exceeds that average.

FAUNA AND FLORA.

The animal life of Australia has excited the lay curiosity and the scientific interest for very many years. It is so different from that which is to be found in other parts the world, so markedly in contrast, and comprises so many departures from the recognised lines of evolution, that a wide field is always open to the naturalist for investigation therein. The dominant note in it is of course the marsupial element in all its branches. Over 130 different species of marsupials have been already classified in Australia and Tasmania, and it is quite within the bounds of possibility that this number will be increased — perhaps materially increased — when the interior of the continent has been more thoroughly examined. Indeed evidence is not wanting that such will be the case. It was only as recently as 1888 that the notoryctes, a marsupial mole, with no eyes and a wonderful faculty for hiding itself by burrowing into the earth, was discovered in Central Australia. It is generally recognised now as a connecting link between the monotremes and the marsupials. The palaeontology of the continent, reveals the fact that in past ages gigantic beasts, mainly of the marsupial type, roamed over the country, and to-day their bones are to be found scattered over the interior, more especially beside the shores of inland lakes and the banks of inland rivers.

Of carnivorous marsupials the three principal varieties are: the Tasmanian Wolf, the Tasmanian Devil, and the Tasmanian Tiger. These three animals are all very destructive to the poultry and stock of the settlers, and for that reason their extinction is only a matter of time. The two former

FERN GULCH AT WARBURTON, VICTORIA.

are
on
th
su
te
th
24
1
th
3
6
1
4

are only found in Tasmania, but the latter is well known on the mainland as well. In all three, unlike the kangaroo, the pouch is directed backwards. Other flesh eating marsupials include the pouched mice, bandicoots, and an anteater, which represents a relic of Mesozoic times. Among the vegetable eating marsupials there have been classified 20 species of kangaroos, 11 of wallabies, 8 of kangaroo rats, 1 tree kangaroo, 1 musk rat, 1 koala (commonly known as the native bear), 30 phalangers (falsely called opossums), and 3 kinds of wombat. The kangaroos range in size from the great grey kangaroo, standing some six feet high, to the little musk kangaroo about eight inches long from nose tip to tail tip, while the wallabies are very little different from the kangaroo either in structure or characteristics. The koala is a tree climber, and it and the wombat are clumsily built. In the far famed *Ornithorhynchus* or duck billed platypus, and the *Echidna* or native porcupine, Australia possesses two specimens of the lowest and most ancient forms of animal life. Both are pouched and both lay eggs. The former is amphibious in its habits, has close thick fur, webbed feet, and a flat beak. The fur of the *Echidna* is thickly mingled with spines and its muzzle is protected by a long cylindrical beak which is not at any time provided with teeth. The feet are stout, unwebbed, and fine clawed, and the tail is short and conical.

The only non-marsupial mammals of Australia are the dingo or native dog, the buffalo of the Northern Territory (which however is not indigenous), and the fruit and flesh eating flying foxes of which there are several kinds. The dingo is supposed by some naturalists to have been introduced by early immigrants from Asia or Indonesia, but bones of a fossil dingo have been found in pliocene tertiary strata in juxtaposition with those of the diprotodon and other extinct animals. The dingo is an object of aversion to squatter and selector on account of its predatory instincts, but is still very well represented in the interior. It interbreeds freely with the domestic dog, crosses being common throughout the settlements. There are also several varieties of native rats.

The reptiles of Australia include very many species of snakes, both venomous and harmless. Of the former the best known and the most poisonous are the black, the brown, the tiger, the superb or copper headed, and the death adder. In the tropical regions there are of course others perhaps as harmful, but their restricted habitat renders them less dangerous to humanity. It is calculated that two thirds of the snakes of Queensland are poisonous in some degree. None of the Australian snakes are said to be

as deadly as the Indian cobra, and though cases of snake bite are common throughout the summer, a small portion only of them prove fatal. Among the most widely distributed of the harmless varieties are the carpet and diamond snakes, both true pythons. The former sometimes attains a great length, specimens of from 10 to 15 feet being fairly easily obtainable. Lizards are present in great variety, ranging from the iguana (or goanna as it is locally called), one species of which sometimes measures 6 feet in length, to the rock gecko, a curious but harmless little creature. Two species of crocodile infest the rivers and creeks of North Queensland, but the loss of human life from their agency is practically non-existent, although cattle, sheep, and other domestic animals frequently fall victims to them. Of frogs there is an immense choice, the tree and swamp frog being the most familiar.

Nearly 800 different species of birds have been found in Australia, Tasmania, and adjacent islands. The largest bird in the continent is the emu, belonging to the order of Struthioness or running birds, furnished only with rudimentary wings. Of the same order is the Australian cassowary, to be found in the north of Queensland, but rapidly becoming scarce. The game birds of the continent embrace the wattled talliegalla and a mound building fowl, besides several species of quail. The plain turkey or Australian bustard, and waders such as spoonbills, herons, ibises, bittern, etc., and enormous numbers of waterfowl of all descriptions, such as ducks, geese, grebes and black swans, are also to be found. The last named is essentially an Australian product and is met with in all parts of the continent. There are twenty one varieties of pigeons frequenting the mainland, some of the northern varieties being of considerable size. Parrots and paroquets are especially numerous, and the order Psittaci includes many beautiful specimens of cockatoos, lorries, and parrots. The black and white cockatoos, the yellow and pink crested, and the grey and red gallah are the best known of the first named, and in some parts of the States prove very disastrous to the farmers' crops, which they visit in flocks of some hundreds. There are eight specimens of lorries in Australia, the most familiar being the gorgeously plumed Blue Mountain lorry. The Australian paroquets are very widely distributed, and may be seen everywhere by anyone who takes the trouble to look for them. Among the distinctively Australian birds may be mentioned the giant kingfisher, usually known as the laughing jackass, which avoids the water and feeds upon small reptiles, in consequence of which it is protected by legal

enactment in most of the States, the lyre bird, so called from the shape of its tail, and the bower bird which builds bowers of twigs, ornamenting them with any brightly coloured or glittering objects it can pick up. Twenty eight kinds of eagle and hawk constitute the birds of prey of Australia. The largest is the wedge-tailed eagle hawk, while the white bellied sea eagle and the white headed osprey frequent the coast. Nocturnal birds of prey are eight in number, chief among them being the great owl of the brushes, and the sooty owl. "Many of the Australian Birds being beautifully plumaged", says T.A.Coghlan, "are no mean songsters, and others again are possessed of remarkable powers of mimicry and ventriloquism."

As in fauna so in flora Australia has its characteristics products. The chief among these is the eucalypt, that large family whose representatives are to be found all over the continent and Tasmania. The gum tree's stately bole, rising sheer from the underbrush with its feathery plumes of silvery green gracefully swaying to the wind, is the dominant note in most Australian landscapes — at any rate southward of the tropic of Capricorn. It would however be impossible to convey in a paragraph any adequate idea of the many varied types of vegetation to be met with in Australia, and the luxuriance of it in these regions favoured with an abundant rainfall. The tropical scrubs of the coastal districts of Queensland are sometimes almost impenetrable, and are really virgin forests with palm, tree ferns, ficus, climbing plants, lianes, orchids, and the rest. The ordinary scrub of Australia is of quite a different character, being found in regions where plentiful rains alternate with periods of drought. Certain plants are adaptable for these conditions and flourish in spite of the continued dry spells. Such scrubs cover immense areas of country, and among them are the bingalow and myall scrubs of Queensland, the mulga scrubs of New South Wales, and the mallee scrubs of Victoria. Many of the natural grasses of the interior are possessed of nutritive and drought resisting properties which have become famous, and indeed nearly all the indigenous grasses furnish excellent pastorage for stock, though on the coast they are apt to grow rank and sour from excessive moisture. The eastern side of Australia is not particularly noticeable for the variety of its wild flowers although some of the species such as the waratah and the flannel flower are strikingly beautiful in their appearance. In Western Australia on the contrary, wild flowers grow in vast profusion, and visitors to that State never fail to be impressed with their beauty and abundance. Many of the timber trees of Australia have a

commercial value, and the hardwoods especially have of late years been in great demand all over the world. There are many different kinds obtainable, all of which possess remarkable tenacity and hardness, while a few are eminently fitted for resisting the terede and other marine borers. The scrubs of the coast supply many timbers, exceptionally suitable for furniture and cabinet making, some of the tropical woods when seasoned and dressed showing a beautiful polish and grain. Ferns grow luxuriantly in all localities, from the gigantic tree fern to the most delicate maiden hair, and those whose hobby or profession is botany will find more than enough to satisfy their scientific predilection in every part of the continent.

POPULATION.

Australia stands to-day as a pre-eminent example of the success of the colonisation methods of the Anglo-Saxon race. It is hard for the visitor to its shores, especially for those whose business or whose pleasure is in the great cities of the Commonwealth, to realise that less than a century ago the number of people of European descent in the whole of the continent totalled less than 10,000, and that these were mainly congregated in lowly settlements on the fringe of the eastern coast about Sydney. Year by year, decade by decade, that number has gone up by tens of thousands, fed by successive waves of immigrants, hardy, capable men who came from their English home at the bidding of their adventurous spirit, the heritage of the forefathers who from the days of Drake and Frobisher — and even before — have swept the seas in search of new homes or new excitements. Sometimes it was the "lustful gold" that called them forth, sometimes a mere desire for a wider, freer life than their own land could afford, but always they who have come to Australian shores have, like the ancient Greeks, severed their ties with the mother land, and have gathered about them there a hearth and home that holds them to the love of their adopted country.

It has been an ideal of Australian policy from the very early days to encourage immigration of free men, even to the extent of assisting such desirable colonists materially to meet the expense of the long sea voyage. The gold era of course required no such adventitious aids, for men were all too eager to seek their fortunes on the fields. But when that fever had abated, assisted immigration became a recognised plank in the policy of the responsible governments who guided the destinies of each State, and many thousands, particularly

in Queensland, were added to the population in this manner. Of later years the influx of population in this direction has steadied down to a considerable degree, although the discovery of gold in Western Australia accounted for a very marked re-distribution and an enhancement of that State's figures during the decade commencing with 1891.

The natural increase, that is to say the surplus of births over deaths, has always been and still is an important factor in the growth of Australia's people, and very considerable additions are yearly made by this channel. As a consequence of the character of the colonisation, the vast majority of the Australians are either British or descended from British parents. At the census enumeration of 1901, natives of Australasian States formed three fourths of the population, and next to them natives of the United Kingdom were by far the most numerous class. Of the natives of foreign countries, immigrants from Germany total more than any other nationality, and in truth Australia is well satisfied that it should be so. "Germans make excellent colonists", is a truism that has for many years been recognised by all sections of the community. Unlike other European nations, whose one idea is to squeeze a competency out of Australia and return post haste to their native land, the German when once he has settled, stays. He becomes acclimatised, identifies himself wholly with the interests of the locality in which he finds himself, works with little thought of returning to Germany, more often than not marries a daughter of the soil, and his children are Australians in every sense of the word. In fact in not a few instances the first generation itself may be called Australian in view of their very evident desire to become an integral part of the community. It is these qualities which make the Germans valued above all other Nations in Australia. The proximity to Asia has laid the country open to an invasion of the undesirable alien in the person of the Chinese, who have overrun all the States and at times threatened to become a serious menace to their polity. The working democracy of the Commonwealth have, however, long regarded them with an unfriendly eye, and each State has at some time or another passed prohibitory legislation against the threatened calamity.

One of the first Acts of the Commonwealth Government was to pass the Alien Immigration Restriction Act with the same object in view, and it is hoped that the effect will be beneficial. At the census of 1901 the population of the Commonwealth was ascertained to be 3,782,943 (males 1,983,352; females 1,799,591), and at the census of

July 30th 1904, the population exclusive of aborigines and aliens, numbered 3,925,685. The average per square mile of Australia was only 1.32 persons on Dec. 31, 1903, New South Wales with 4.61, Victoria with 13.76 and Tasmania with 6.85, being the only three States with an integer in their averages. That of West Australia was as low as 0.23. These figures are under those for any other civilised country in the world, and demonstrate conclusively that Australia is not by any means inhabited up to the level of her potential productiveness. The occupation of a very large portion of each State, except perhaps in Victoria and Tasmania, as pastoral areas, may be assigned as partly the reason of this, seeing that the care of cattle or sheep needs but a few hands, and the conditions of settlement generally contribute. But small as the averages are, they are very much less when the extra-urban districts are considered to the exclusion of the towns. There is a regrettable tendency in all the States towards the centralisation of its population in its urban and especially in its metropolitan districts, and the greater proportion of its inhabitants are to be found within a twenty mile radius of the principal towns. When it is remembered that the Australian States are still buyers in foreign markets of many of the necessities of life which could be produced within their borders, if only their agricultural facilities were adequately developed, this tendency becomes a matter of grave import, and one that calls for energetic efforts towards the ever present problem of settling the people on the land. The following table gives the population of the six States of the Commonwealth and the population per square mile in each:—

AREA AND CENSUS POPULATION

ON THE 30TH JUNE 1904.

EXCLUSIVE OF ABORIGINES ALIENS.

State	Area sq. miles.	Population	Population per sq. mile 31. Dec. 1903
New South Wales	310,700	1,441,441	4.61
Victoria	87,884	1,206,098	13.76
Queensland	668,497	501,910	0.78
South Australia	903,690	366,240	0.41
Western Australia	975,920	232,047	0.23
Tasmania	26,215	177,949	6.85
Total Commonwealth	2,972,906	3,925,685	1.32

LIVING IN AUSTRALIA.

It is hardly necessary to say that the conditions of living in Australia differ somewhat from those prevailing in the older centres of civilisation. Climate and environment alike are so essentially distinct from the European, that it is but natural that a mode of housing and living should have been evolved which with justice might be considered a characteristic feature of Australia. The fact that the towns of the Commonwealth are comparatively speaking new, renders the price of both urban and suburban property moderate, and as a consequence there is not that overcrowding of surface space, that occupation by numbers of an area of land better suited to two or three that is so observable in the rich cities of Europe, where every foot of land has a value that compels the inhabitants to put it to the fullest use possible. In contrast to this, one finds in Australian cities residential areas almost in the heart of the city and private houses within walking distance of the business centre. The large suburban population, grouped on the outskirts of the principal cities, served by efficient train, tram, river or harbour steamers, is a marked feature of all the Australian capitals and other large towns. The predilection of Australians to hold their own land and house is catered for everywhere by the Building and Investment Societies who advance money to build on the security of the prospective house and accept repayment of the loan in weekly or monthly instalments. Thus it is that every Australian city is surrounded by a more or less wide zone, wherein the houses are small certainly, but comfortable, each standing in its own plot of ground and built in a fashion that affords every opportunity for the enjoyment of the climatic advantages. In this respect Australia impresses the visitor with the fact that it is the place for a man of small capital or moderate income. Living is cheaper and class distinctions less decisively marked than in the Old World, and it is no uncommon thing to find an artisan who would have to occupy a portion of a tenement house in London or New York, living in his own comfortable little cottage. There is no idle rich class to put fictitious values upon property in any particular district, and though of course suburban property varies in value, its acquirement, generally speaking is never beyond the means of those who form the ordinary rank and file of the professional or business circles. In the country, or "bush" as it is generally termed, things are of course entirely different, and away from the lines of railway or remote from the ordinary channels of inter-communication, conditions

naturally are less pleasant. It would be impossible to give an adequate idea of these conditions in the space at disposal, varying as they do from those surrounding the homestead of a well-to-do squatter, whose house and the comforts to be found there resemble those of an English country gentleman, to the slab hut of the way-back selector who lives on the plainest of food and endures manifold discomforts in his work of pioneering in the far interior. The unavoidable disadvantages there to be met is one cause of the aggregation of the urban populations already alluded to, but, at the same time it must be said that in many favoured parts of Australia, country conditions are no worse — indeed in many respects they are a good deal better — than those which obtain among the peasantry of Europe.

OCCUPATION OF THE PEOPLE.

While it may be a little too much to say that there is no leisured class in Australia, it is certain that the proportion of those who do not in some way or other "work for a living" is extremely small, so small as to be scarcely worthy of consideration. The years of Australia's life have been all too few to allow of the formation of an aristocracy of wealth. What fortunes have been made are either enjoyed by the makers or their nearest descendants. There is no long line of moneyed heirs, no unearned increment upon which men who themselves have never done a hand's turn, subsist. It is no wonder then that Australia is democratic, not surprising that her sons, no matter what their calling, have some regard for the masses. And the money that is made comes in the main from the land and the fulness thereof. Pastoral, agricultural, or mineral that source may be, but they are the primary industries and such of the secondary that are intimately connected with them which give the community its employment. By far the larger portion depends directly or indirectly upon these three occupations. Some are directly concerned therein as squatters, selectors, shearers, station hands, farmers or farm hands, miners and so on, while others find work for their hands to do in attending to the manifold wants of such men. In and about the towns of course, there is the usual amount of unskilled labour procurable, and the commercial and professional classes are everywhere fully represented. But all these classes are assisted by the presence and necessities of men employed on the three great primary industries, and it would be hard to point out one calling that, in some

TIMBER-GETTING, WESTERN AUSTRALIA

may c
reiv
redu
C
ector
of th
as w
Natu
the
side
the
land
emp
ion.
pat
just
ma
pai
me
do
too
we
th
th
G
o
n
i
c
!

way or another, slight perhaps but still definite, does not receive some support from these main arteries of wealth production.

Of late years and in the older colonies, workers in factories have become a potent factor in the consideration of the community, and the number of such employees, as well as their importance, is yearly on the increase. Naturally enough New South Wales and Victoria, as being the most populous and in the case of the former the oldest, exhibit this development in the greatest degree. But the younger States are following suit, and already in Queensland, South Australia, and Western Australia, the totals of men employed in these avocations are claiming increased attention. The conditions of employment in these various occupations of the people are, for the most part, of a nature to justify the oft expressed opinion that Australia is the working man's paradise. Wages are high, the cost of living comparatively cheap, and the opportunities for rising by no means insignificant. Recently, the prevalence of socialistic doctrines in the Federal and State legislation, the altogether too tender regard paid to the care of the working man's welfare has been deprecated, and there is a growing feeling that to pamper the masses at the expense of the rest of the community, a line of policy too often resorted to by Governments, is not calculated to be in the best interests of the States or Commonwealth. Certainly dwellers in towns need no such care, and their position as wage-earners there is infinitely preferable to bread-winners in most of the older centres of civilisation. A growing feeling, engendered in part by the last drought, has lately been in evidence, that the sympathies of the coast dwellers might well be extended to the plucky settlers of the interior who for many reasons are far less comfortably circumstanced — that is to say — comparatively speaking. They are still the real backbone of the community, and it is well that those who in part depend upon them should begin to realise the fact.

CONDITIONS OF SETTLEMENT.

As in all young countries, the great need of Australia is population, so that her admittedly vast resources may be adequately exploited. From the time she ceased to be merely a penal establishment, those whose business or ambition was her development, have recognised more or less clearly the urgency of this need, and in each of the States a policy of assisted immigration was adopted early in its

separate life. The natural corollary of this method of increasing population was the provision of land whereon the new colonist might win a competency or at least a livelihood, and by his labour add his quota to the general development of that State wherein he had made his home. Consequently each of the six States had a system of land legislation which is usually liberal in its character, enabling the man with a pair of hands and a willingness for work to carve out a home for himself in the new land and become by easy stages a landholder and a person of weight in the community.

The history of land legislation with its many alterations in tenure, and the record of the change from the days when the Home Authorities granted freely enormous areas to men of influence whose object was their own aggrandisement, are far too complicated matters to enter upon at the present time. Broadly speaking the land question has been a prominent feature of Australian politics since the thirties, while even before that period are to be found recurrent outbreaks of the agitation. At the present day the small holding has become the special care of each State Government — at any rate of those five States which are on the mainland. In all of them the State is still the principal landlord, its tenants being divided into two classes — the squatter and the selector, to give them the epithets usually applied. Between these two classes there is a wide gulf. The squatter pastures his flocks and herds on acreages sometimes so vast that they amount to the area of principalities. These he either owns by right of inheritance or purchase, or lease from the Crown at a moderate rental assessed periodically in the various districts. In many cases the stations or runs are composite in character, part freehold, part leasehold, the latter representing the increased land necessary for the herds of cattle or flocks of sheep which have been enlarged from year to year. But it is to the selector that the Government of each State pays special attention.

Though naturally the conditions vary in detail, the method of land selection in its main principles is the same, at any rate in the Eastern States where the influence of New South Wales is more felt. In New South Wales, Victoria, Queensland, and Tasmania, occupation is offered to the industrial population on a system of leasehold with deferred payments, such payments being taken partly as rent and partly as satisfaction for the price of the block taken up. Such a system enables a man with a small capital to acquire land with the pre-emptive right of purchase at a compara-

tively small initial cost, and to become the freehold possessor thereof after a few years' labour, provided of course that he complies with the conditions imposed by the land laws. The Torrens method of land transfer is universally adopted in Australia now, and under it the ownership of land is free from all vexations, formalities, and disadvantages such as obtain in the Old World.

THE ABORIGINE.

In comparison with its attraction and importance, the study of the Australian aborigine has received but scant attention from the ethnologist and anthropologist of the present day. The books published on the subject — at any rate those with a tendency to the scientific point of view — are few and far between, and though most writers on Australia devote a few pages of their work to a consideration of the native races of the continent, their effort to elucidate his complicated genealogy and explain his quaint and absorbingly interesting manners and customs usually fall short of usefulness. Of late years certainly a strenuous endeavour has been made by a few enthusiasts to place on record before it is too late, the ethnological attributes of a race that is fast vanishing before the inroads of Western civilisation. In Central Australia Professor Baldwin Spencer and Mr. F. Gillen are doing splendid work in investigating closely and scientifically the habits, superstitions, and attributes of the tribes of that region, while in the north of Queensland Mr. W. E. Roth as Protector of Aborigines there, exceeds the thoroughness of his official work by the excellence of his observations. There are others scattered through the length and breadth of Australia who are helping, each in his own little way, to the better understanding of a curious nation and to these isolated and independent students, the Royal Anthropological Society, with headquarters in Sydney, serves at once as a reference and encouragement.

And the end is every way worthy of the means. We know now that whatever may have been the original habits of the Australian aborigine — for that he is truly of the soil is unlikely — he represents to-day one of the few remnants of primitive man of which the world can boast. Down through the ages he has preserved his ancient manners and customs, his tribal conventions and his rudimentary religions. While other nations have worked out their destiny and have evolved to the highest point that civilisation has yet reached, the Australian aboriginal, cut off by geographical

position from the outside world, has not been concerned intimately with the struggle for the survival of the fittest. Most of his land yielded him at any rate a bare subsistence if not comparative plenty. He had no cause to employ, and thereby develop, his reasoning faculties. He hunted and was fed, was tired and slept, secure from visitation of wild carnivora, the clemency of the climate asking nought of him in the way of ingenious devices to obtain warmth and shelter. His petty tribal wars did not arouse in him any of the fighting instinct, the necessity for protecting himself by means other than his two hands, and he had never to submit to the inroad of better equipped people who would force him either in self defence or ultimate subjection to adopt their standard of development. And so through the ages he has remained in the nature of an anachronism, offering the ethnologist a chance for extended study and voluminous deduction such as is seldom afforded now-a-days. It is only to be regretted that the lost Tasmanian race who were very evidently still more akin to primitive man, has not left for present day savants some remaining representatives. But the last of them passed away in the person of Treganini, who died in 1876, and investigators since then have had to depend on the observations of those who were more fortunate, in that, living in the last generation, they had the opportunity of coming into personal contact with the Tasmanian native, though the knowledge they thus gained lacked the scientific application (in some cases) which would make it complete.

Various theories have been advanced as to the original habitat and the invasion of Australia by the so called aboriginals, different scientists naturally holding different views regarding it. The most probable supposition is that there were several — three at any rate and perhaps more — waves of immigration. First in point of time came the ancestors of the Tasmanians whose migrations may have occurred in the geological era when Australia was joined to New Guinea on the north and Tasmania on the south. These Tasmanians were the true indigenes of Australia, and were of the same race as the ancestors of the Papuans. In fact, in all probability their point of departure was New Guinea, to which island they had come round the south and south eastern coasts of Asia from Africa. They were of Negrito stock, the same foundation as that of the present day Melanesians. After these, Papuan or Melanesian tribes spread over the whole continent and crossed over Bass Strait (which may then have been dry land) and then there followed the invasions of hostile people. These new comers

were Dravidians, closely akin to the races that inhabit to-day Southern and Central India. Even at the present time there are features in the Australian polity notably in the complicated marriage laws of some tribes, which point emphatically to the relationship. It seems likely that these Dravidians came to Australian shores in an intermittent stream of immigration, driven out from their old home by the presence of a stronger and more powerful race entering India from the north, and forcing its inhabitants either to subjection or to flight. The Dravidians (it must be understood that the term is only used for want of a more concise definition), having been settled longer than the Papuans before they made their move, were more intellectually developed and better equipped than their predecessors. Consequently the Tasmanians were compelled to give way before them. Entering the continent, most probably on the north east coast of what is now Queensland, the new race spread out fanwise, its strongest stream marching south westward and driving the earlier inhabitants before them. Part of these, chiefly the women who would naturally be the first object of acquisition aimed at by the invaders, were absorbed. The remainder retreated before the major force until they reached the more broken ground of Tasmania, and ensconced themselves in the mountain fastnesses. The hundred and fifty mile wide Bass Strait, when once it had broken through, served as a still greater protection, and their victors, content with the land they had won, left them in peace in the island which was in later years to be the grave of their race.

In time, the Dravidian element in the Australian aboriginals, spread through the length and breadth of the continent. The women of the conquered Papuans helped to preserve in the new language some remnants of the old, and may even have introduced and kept alive some customs and superstitions. But to all intents and purposes Australia was peopled by a superior race, from the same original stock it is true, but far removed from the Tasmanians in development and intellect. There are yet other immigrations to consider, but these later ones were neither so far reaching nor so lasting in their effects. They consisted mainly in incursions of the Malays to the northern and especially the north western coasts. It is in these districts that the presence of Malay blood is most noticeable, the evidence of their visits most pronounced, although signs are not wanting that scattered settlements were formed by them on the east coast and in the interior also. The rock paintings on the Glenelg and elsewhere in North West Australia

supply indubitable proof of intimate connection between that portion of the continent and Sumatra. But the Malay visits, though they left their mark, both on the physical attributes of the Dravidian occupiers and on their language and customs, were not of a permanent character, being rather in the nature of fishing or trading excursions, maintaining a more or less continuous intercourse between the mainland and the islands of Indonesia.

The facts that support the theory thus briefly outlined above are far too numerous to be detailed in the present paper, although an attempt at outlining the main heads may perhaps be made. In the first place the evidence of physiology, shows that the extinct Tasmanians were neither so tall nor featured in the same way as the Australians. Despite marked disparity (the outcome of mixed blood) the average height of the Australians is about 5 ft. 5 in. or 5 ft. 6 in., as compared with the 5 ft. 2 in. or the 5 ft. 5 in. of the Tasmanians. A strong point is made against the community of origin of the two races in the difference and quality of the hair. The Tasmanians had woolly hair, and the Australians, though in some instances the same characteristic is to be noted, are generally speaking straight haired. The exceptions (attributable most probably to atavism) strengthen rather than weaken the supposition. From mythology and tradition may be gathered, the legend of the Eaglehawk and Crow, which if it be anything more than a fable seems to be a real attempt to hand down orally an historical account of the conflict between the two races and the ultimate victory of the Australians. Mr. J. Mathew in his book "Eaglehawk and Crow" urges this argument at length, and indeed, his opinions and conclusions are being freely drawn upon in this effort to assign workable deductions to the origin of the Australian race. He believes that the names Eaglehawk and Crow designated the two races, and in support of this assumption advances a formidable array of legends, all having at least a collateral bearing, the one upon the other pointing to a contiguous if not to a common origin. Again the weapons, implements and tools of the Tasmanians were of the same type, suggesting that their beginnings were similar, but, as has already been pointed out, the Tasmanian left the land of their sojourn, if not of their birth long before the Australians, and the latter had by conflict or connection with other, more highly developed races, learnt more and progressed further in evolution. Thus the Tasmanians had neither shield, boomerang, or womera, while their clubs and spears lacked the variety and higher finish of the Australian article. Their stone implements

were, generally speaking, only chipped in contrast to the ground and polished axe heads of the Australians. In other words the Tasmanians were Palaeolithic and the Australians Neolithic, with the reservation that in isolated instances the two eras are found side by side on the continent — a condition in no wise contrary to the main theory of evolution.

"There is," says Mr. Mathew, "a marked resemblance in the customs of the two races, and it may be said that such practices as were universal in Australia were followed in Tasmania." The list of identical customs, ranging from the imitatory rites to the hunting of kangaroos, is a sufficiently imposing one, and could doubtless have been added to if the Tasmanians had been more deeply studied while they existed. It is therefore fair "to conclude that such peculiar practices as are common to the two nations have been inherited from the primitive Papuan Australians" (i. e. the Tasmanians either as a race, or represented by the captive women in the hands of the Dravidians). In comparing the two languages remarkable analogies are at once made manifest, at all events as regards one section of the mainland race. With so many different and at times confusing dialects as the speech of the present day native contains, it is a matter of difficulty to arrive at any definiteness of root words, but there are undoubtedly lingual traces of the Tasmanian in many of the Australian dialects, the distribution of the tribes which show these traces most clearly, bearing out the conclusion that the Tasmanian language crossed over from Victoria via Bass' Straits.

So much, then, for the first part of the theory. The evidence, tersely as it has been, points in each of its links to the facts that the most primitive Australian was the ancestor of the Tasmanian, and that a substratum of Tasmanian Papuan blood is to be found more or less marked in the modern Australian. There remain for consideration the Dravidian and Malay elements. It is conceded on all sides that on the original race which inhabited Australia "there must have been grafted a very strong scion from another and in some respects a very different stem. The people who formed this fresh addition to the primitive race had probably a "lighter complexion and straight hair". Mr. Mathew asserts that there is much in the social system and the linguistic analogies of the Dravidians to abundantly justify the conclusion that the Australian addition came from that race. Chief among the common characteristics is the complicated laws of kinship and marriage known generically as the Kamilaroi or Kamilroi system, which is identical in its main particulars with the Tamulic system. When to this

powerful token of affinity are added the many similarities noted by investigators of the languages of Australia, in comparison with those of Central and Southern India, and the fact that the boomerang is known and used by both races, it becomes an almost inevitable conclusion that the second invasion of Australia was by the Dravidians. The Malay element in the composition of the present day Australian race, though not so strongly marked or so universal, is still very persistent, more particularly in the matter of linguistic influences and in the nature of the cave paintings found by Sir George Grey Brewster and others at different localities. Thus there were three main streams of invasion — the Papuan, the Dravidian, and the Malay — each leaving its influence indelibly upon the Australian aboriginal of to-day.

With such diversity of ancestors it is not surprising that the Australian aborigine exhibits great diversity of type — so great that descriptions of the race which have been published according to personal observations, seem to the superficial reader almost diametrically opposed to one another. The physical appearance of the Australian black conveys the impression generally of a medium height, a lithe wiry body, strong "stringy" muscles, and a fairly well proportioned frame. The colour varies from a copper to a brownish black, and the hair, according as the Papuan or Dravidian blood predominates, is frizzy or lank. Where the former is the case there is considerable growth on the face and body, but in the latter the skin is far more smooth and the beard more scanty. The average Australian head is pyramidal in shape, with an abnormally thick skull and a very small cerebral capacity. The senses have naturally been wonderfully developed and the aboriginal's consummate skill in tracking has become proverbial. Although it is customary to set the Australian very low in the scale of humanity, extended acquaintance engenders a more lenient view of his mental and moral characteristics. As in the case of all immaturely developed human beings, intellectual development has been along the imitative lines. They have a natural propensity for mimicry, and are always imitating those with whom they come in contact. They lack application however, though they are keenly observant and quick to learn. Unstable they certainly are, but this attribute with its consequent rapid changes of emotion, they share with other savage peoples. While some have condemned them in unmeasured terms for their predelection for thieving, others have praised their trustworthiness, and the divergence of opinion may be assigned to this instability of character which prompts at different times totally distinct

and diverse actions in the same individual. The blacks, as they are usually called, have been extensively used on stations in the care of sheep and cattle, and as long as they are allowed to abandon their work and resume their indolent habits of savagery when the mood takes them, they have proved excellent stockmen and shepherds. In their native state they have no permanence of habitation and are truly nomadic. A sheet of bark, propped against sticks as a breakwind, is sufficient protection against the weather, and food, if not in plenty, at least enough can be obtained without resource to agriculture. Consequently their constructiveness and husbandry is practically non-existent. They utilise what Nature has for them without any attempt at artificial improvement, and when the food supply of one locality has been exhausted, they simply migrate to another which has been lying fallow. In the search, capture, and preparation of food they display a considerable amount of ingenuity and though their dietary scale would hardly appeal to a European they can appreciate to the full the few delicacies they may find in the course of their wanderings. Some slight attempt is made by them for the conservation of food, such as the burying of a store of Bunya nuts for the time when the season has passed, but more usually the maxim followed by them is "sufficient for the day is the evil thereof".

Practically the Australian black in his or her native state is destitute of clothing. When that clothing is present it is almost invariably composed of the skins of the opossum, sewn together with kangaroo or other sinews. In places the females wear a short fringe of vegetable fibres, skin, etc., hanging from a belt round the waist, and the males occasionally follow suit in a similar direction. The ornamentation of their bodies is not elaborate, the principal effort to this end being in the scarring of the body with transverse or longitudinal cicatrices. These are produced by cutting the body and filling the incisions with some foreign matter to make the sides rise up and form ridges when the wounds have healed. Painting with pipeclay and red ochre, and anointing with animal fats is practised. In the case of ceremonial functions ornamentation is extensively made use of, and some of the corroboree "costumes" are fantastic in design and elaborate in construction. The most characteristic Australian weapon is of course the boomerang which is in almost universal use. Its properties are too well known to need recapitulation, but it may perhaps be mentioned that the property of returning to the thrower possessed by the Australian weapon does

not occur in the African or Indian variety. A great variety of spears and clubs, light or heavy for the chase or combat are also universal, and shields made of tough wood are in common use. The Australian has not yet reached the iron age, and when he wanted tomahawk, chisel, or knife, before the white man came, he had to content himself with these implements made out of stone. Stone was also utilised for mortars, grindstones and whet stones, while a ground and sharpened shell provided a cutting edge for dressing skins or fining down weapons. Other domestic implements may be enumerated in the string of vegetable fibre, out of which dilly bags, nets, and fishing lines were constructed, the koolimans and calabashes for water vessels, fish hooks of bone, shell or wood, and various others of less important properties.

To attempt anything like a comprehensive description of the tribal laws, manners, customs, and institutions of the Australian aboriginal within the limits of the space at disposal would be a matter of impossibility. The tribe, or to use a better word the pack, obeys strictly the laws handed down to it by oral tradition, but for the enforcement of those laws there is no recognised authority — indeed there is little need for one, the obligations imposed by the teachings of the elders being carried out in unquestioning obedience. The small nomadic communities into which the race is split up are usually united by the bond of consanguinity and acknowledge a measure of control from the elders, whose experience naturally influences the younger members. For such a primitive people, the rules of relationship and the co-relative matrimonial restrictions are of a most involved and intricate character. It is not proposed to enter upon any investigation of these rules with their innumerable modifications in the present article. Whole volumes have been written on the marriage laws of the Australians, and the full explanation of them is still lacking, though close students have arrived at the broad basis upon which the ramifications have been built. Suffice it to say that every pack or tribe is subdivided into two or more classes or totems, marriage within which is forbidden on pain of death. Descent is usually through the female, and the class name of the mother determines the class name of the child. The classes of totems are usually designated by the names of animals, but the names of plants and other natural objects are also employed in parts. In the days before the white man came, marriage took place either by regular betrothal, by barter, elopement or capture, and the matrimonial rites were simple in the extreme. Not so those attendant upon the

ABORIGINAL WOMAN IN BARK CANOE
LAKE TYERS, VICTORIA.

attainment of puberty. The stages to manhood — and in some cases to womanhood — are clearly and definitely marked by subjection to certain rites, and the final ceremony when the boy is entered to the tribe as a full blown warrior and bread winner, is made an occasion for immense gatherings, and the practice of severe and solemn initiatory functions. Such functions are universal though the details vary in different localities. The ceremony was customarily of several days duration, and the youths were, by various means, tested in their powers of endurance, stoicism, and courage, the severest punishments being inflicted in the case of failure. Mutilation is practised at these ceremonies, and in many ways the ordeal is a severe one. Once it has been successfully negotiated however, the novitiate is admitted to the councils and is eligible for marriage. Of course, wherever the blacks have come in contact with the whites, the influence of tradition has been weakened and the observance of the laws mentioned has slackened in their entirety. But in many parts of the continent, such as the north of Queensland and the centre of South Australia, western civilisation has so far not made its appearance, and in these parts invaluable records can still be obtained of ancient ritual. The corroboree is the general name given to these initiation functions, but the term has been extended to include all functions where the aboriginals meet together for the purpose of social intercourse and the more definite name assignable to them is Bora.

It cannot be said that the Australian aboriginal has a religion. Superstitions of course there are in plenty and some of these are akin to religious observances, but anything in the nature of a united veneration for any particular deity is almost wholly lacking. Some tribes certainly give evidence of a worship for a beneficent deity, but this worship is local in its application, and only allied tribes exercise it. As in most savage nations the belief in sorcery is practically all prevailing and any injury or suffering is immediately assigned by the sufferer to the malevolent influence of some individual, or spirit, over him or her. Consequently medicine men or magicians are in great request to counteract such influences, and these employ very much the same means of awing their audience or impressing them with their power, as do their fellows all over the world. Spirits are supposed to exercise great influence over the living, and the blackfellow peopled the wilderness and water with ghosts, evil or good, to whom were ascribed many properties. In some cases ancient heroes became deified, their exploits being handed down by tradition from one generation

to another, and, it may be concluded, losing nothing in the telling. Myths and legends, some with a distinct moral attached, abound in plenty, and the old men of the tribe are, in the unsettled districts at any rate, perfect mines of tradition.

In the arrangement of the above article it has been a matter of some difficulty to delete all but the essentials and to convey a comprehensive description of the ethnological sides to the study of the aboriginal of Australia. That much — very much — more remains to be said, that in curtailing facts to the barest outline much has been sacrificed, must of course be admitted. But fortunately the literature of the subject includes some books of great value to which the student anxious for further information may be referred. Such books are "Eaglehawk and Crow" by John Mathew, to which extended reference has been made in the course of this article, "Native Tribes of Central Australia" by Professor Baldwin Spencer and F. J. Gillen, "The North West Central Aborigines" by Dr. W. E. Roth, "The Aborigines of Victoria" by R. Brough Smyth, "Kamilaroi and Kumai" by Fison and Howitt, "The Aborigines of Tasmania" by Ling Roth, and other books. To any who are interested in ethnology, either from the general or purely scientific point of view, the study of the Australian Aboriginal is a most fascinating one, repaying a hundredfold the time spent on it. That more workers in the field should volunteer their services before the dying race — for dying it undoubtedly is — shall become extinct, is the devout wish of all who have made the matter the aim and ambition of their lives. Few branches of the science of anthropology would be more useful when developed and fewer still would yield such a rich harvest.

DISCOVERY AND FIRST SETTLEMENT.

Although some geographers include some of the South Sea Islands in Australasia, the term is generally used to describe the continent of Australia, Tasmania, and the islands of New Zealand. They were formerly subdivided into seven colonies, but since Jan. 1st 1901, the five states of the mainland and the Island of Tasmania comprise the Commonwealth, while New Zealand remains a separate colony.

The accurate period of the discovery of Australia is doubtful, but there is evidence that it was known and visited by the Chinese for the purposes of trepang (bêche-de-mer) fishing as far back as the thirteenth century. The

Malays also knew of its existence. Old manuscript charts dated 1531 and 1542 of an extensive country situated to the southward of the Moluccas and corresponding in position with Australia, bear the French name of Jave la Grande, but the notes and remarks on these charts being in Portuguese, it is believed by some authorities that the Portuguese had the honour of being the first discoverers, although the date of the first chart would agree with the year in which Guillaume le Testu of Provence is said to have sighted the continent. It has also been claimed that another French navigator, Binot Paulmyer, Sieur de Gonneville, was blown out of his course and touched at some portion of the West Australian coast as early as 1503, and survivors of Magellan's expedition are said to have sighted the west coast in 1522.

In 1606 the Spaniard Luis Vaez de Torres, the military commander of a small fleet of three vessels sent out from Callao in Peru by Philip III of Spain to search for a Southern Continent, sailed through the strait separating New Guinea from Australia which now bears his name, and skirted the northern part of the mainland. In the same year the Portuguese pilot Fernandez de Quiros, navigator of the same expedition, who had become separated from Torres owing to mutiny among the latter's crew, sighted a land which he named Australia del Espiritu Santo, believing it to be the great Southern land he was in search of, but which is now known to have been an island in the New Hebrides.

As early as 1597 the Dutch historian Wytfliet described Terra Australis and expressed the opinion that, when thoroughly explored, the great continent lying to the southward of New Guinea would prove to be a fifth part of the world. No attempt however was made by the Dutch to explore those regions until on the 18th November 1605, when the Dutch yacht "Duyfken" under the command of Captain William Janez left Bantam in Java by order of the President Jan William Verschoor, to explore the island of New Guinea and the unknown lands lying to the southward. In March 1606 the Duyfken entered the Gulf of Carpentaria where some of the crew landed and were killed by the natives.

In the year 1616 Dirk Hartoch in the "Eendracht" explored the west coast, followed in 1618 by Zaachen, and later by Van Edels, Nuijts in the "Gulden Zeepaerd", Pelsaert, De Vlaming who discovered the Swan River, and others.

In 1622 the ship "Leeuwin" first rounded the cape which now bears its name, and in 1642 Abel Jansen Tasman discovered Tasmania, which he called Van Dieman's Land,

taking possession of it in the name of the Dutch Government. Not long afterwards the same navigator sighted and named the islands of New Zealand. It is to these early Dutch navigators that we owe the first authentic accounts of the Western littoral and many of the names given by them to prominent headlands and other physical features are still retained. The name of New Holland was given to the continent in 1664 by the Dutch Government who then possessed rough charts of the western coast and islands.

William Dampier was the first Englishman to tread Australian shores. He visited the west coast on two occasions: first in 1688 as a member of a party of buccaneers, and later in 1699 in charge of H. M. S. "Roebuck" when he explored a great part of the west coast. But the history of his travel published after his return to England represented the country as so inhospitable and barren that the idea of utilising it for settlement was not entertained, and it was not until 71 years later, when Captain Cook during his famous voyage in the "Endeavour" discovered the east coast of Australia and annexed it in the name of His Majesty King George the Third, that the attention of the British Government was directed to the possibility of founding a settlement in the new country. The interest of the home authorities was further drawn to the country by the enthusiastic accounts given by Joseph Banks, a young English naturalist who accompanied this expedition.

Owing to the loss of the American colonies by their successful revolution, it was found necessary to find an outlet for the disposal of criminals, and accordingly in the year 1787, a fleet of eleven ships consisting of H. M. S. 20 gun frigate "Sirius" with its armed tender the "Supply", three store ships, the "Golden Grove", "Fishburn" and "Borradaile", and the transports "Alexander", "Scarborough", "Lady Penrhyn", "Prince of Wales", "Friendship", and "Charlotte" under the command of Captain Phillip were sent out with the first batch of 564 male and 192 female convicts, besides a number of artisans, marines and their wives, and arrived in Botany Bay in January 1788.

On finding an inlet situated a few miles further north, and marked on Cook's charts as a boat harbour, to be what is now Port Jackson, a beautiful spacious harbour, in every way better suited, and in fact an ideal place for a settlement, the fleet subsequently sailed round and finally anchored in Sydney cove on the 26th January 1788. The colonists here disembarked, and Captain Phillip, to whom was granted the commission as Governor and Captain General of New South Wales, formally proclaimed the new colony.

THE HISTORY OF AUSTRALIA.

For all practical purposes the history of Australia may be said to date from the year 1788. All that went before — the theories of the mediaeval geographers, the attempts to chart the unknown land, the voyages made by the various exploratory expeditions from De Quiros to Cook — left little that was permanent. A stretch of coastline mapped with more or less accuracy, a few more fingerposts to aid in changing the terra incognita of the ancients to a land that at any rate had a definite place on the world's surface, the reports of commanders and scientists who accompanied the expeditions, comprised the knowledge of the new continent possessed by the civilisations of the Old World until the eighteenth century had well nigh drawn to its close. There were no attractions offering to the most adventurous, in those days of weary sea voyages of many months, to journey to the great South land in search of wealth. European nations generally were fully occupied within their own borders, and were there no other cause, the long wars of the eighteenth century acted as a check to the wanderings of their young manhood, who for the most part found their presence necessary in the ranks of their country's army.

And so Australia, despite the researches and discoveries which form such a fascinating chapter of the history of exploration, remained unexploited for many years, even after Cook had made his report and Banks had published his enthusiastic accounts of the capabilities and potentialities of the new British possession.

Over the first years of Australia's history it is unnecessary to linger, the black and gloomy records of the old convict days have long been closed, the mistaken policy which for many years retarded the advancement of the country has long since been rectified, and with the influx of a population of free settlers, every trace of the old system has been definitely wiped out. But certain events of the period's history stand out prominently. Before the nineteenth century had begun, the intrepid Bass and Flinders had added much valuable information to the topography of the east coast of Australia. The former charted the south coast, and with Flinders in 1798, proved that Tasmania was unconnected with Australia by circumnavigating the island in the "Norfolk".

Flinders, in 1799, struck northward, mapping the coast carefully as far as Hervey Bay in Queensland. In 1801 he was given the "Investigator", in which he sailed from Cape Leeuwin right round to the Gulf of Carpentaria. As the

Dutch had practically charted the shore line of Western Australia and the Northern Territory of South Australia, the survey of the whole of the Australian coast was completed when Flinders reached the Gulf of Carpentaria. He had, however, to abandon his intention to sail round Australia owing to the unseaworthiness of his vessel, and in 1803 he sailed from Sydney with his papers, only to be kept a prisoner by the French in Mauritius. He was released in 1810, when much of his work had been appropriated by others, and his journals only became known to the English a few days before his own death. In 1797, the Hunter River, where Newcastle now stands, was discovered by Lieutenant Shortland, and coal was exported therefrom as early as 1799. Tasmania had been settled in 1803—4 in order to forestall French designs on Australia, and served as a new outlet for the ever increasing convict population.

The food supply of the settlement was in its early days a constant source of anxiety, and strenuous efforts were made by successive governors to obtain a self supporting foundation. Governor Phillip had established a farm at Parramatta, or Rose Hill as it was then called, and had sent Lieutenant King to found a convict station at Norfolk Island, with instructions to cultivate the soil there and endeavour to make it the granary of Sydney. Furthermore he had explored the country to the west, had found rich soil on the banks of the Hawkesbury, and had done his best to procure a farming community for its efficient development. But free settlers were few and far between, and even though farms were scattered at rare intervals along its banks, the occupants made more profit out of their grain when they distilled spirits from it than when they sold it for flour. The gaol walls of the Blue Mountains were left unpierced for obvious reasons, but between them and the coast was much good land which was slowly but steadily brought into usefulness, and when Governor Phillip left Sydney in 1792, all danger of a famine was past, though for some years afterwards periods occurred in which there was a scarcity of foodstuff.

The conditions of government at this time were naturally autocratic in their character, and to aid the Governor towards a more efficient maintenance of law and order among his unruly subjects, a regiment known as the N. S. W. corps was enrolled in London for service in the Australian convict settlements. This corps or rather its officers were, for the most part, men who had joined it purely for the sake of money making, and the means they employed to

that end were not always beneficial to the colony. To some however must be attributed an honest desire to increase the value of the colony's production, and chief among these is undoubtedly John Macarthur, whose earnestness in the matter of sheep breeding resulted in the commencement of the great wool growing industry of the present day. But until 1808, the Corps were the real rulers of N. S. W., and each Governor had to combat, generally unsuccessfully, an assumption of the powers of administration in their hands. But in that year matters came to a climax when Major Johnston as commanding officer deposed Governor Bligh, and himself assumed the reins of government. Such a gross violation of all the canons of good government was not to be borne, and the home authorities took stringent measures to obviate its recurrence. Governor Lachlan Macquarie was sent out. At the end of 1809 Sydney and the other convict settlements were made garrison towns, and a new era in the history of the colony was begun.

Fortunately Governor Macquarie in whose charge the destinies of the young colony remained from 1810 to 1821, proved the right man in the right place. Settlement was encouraged in every way, Macquarie himself making various journeys inland and marking out townships and roads in all directions. Praiseworthy attempts were made to improve the conditions under which the convicts lived, and to make the place a reformatory rather than a penal settlement. Macquarie was concerned more for the encouragement of those who had served their sentence, to become good citizens, than for the discipline of those who were still in prison or under control, and the Emancipist class in consequence received many grants and privileges that had long been lacking them. The Blue Mountains were crossed, the vast plains of the interior made available to settlement, and in 1815 the town of Bathurst was founded. Two years later Oxley opened up the country further to the west along the banks of the Lachlan and Macquarie, while towards the South, Hamilton, Hume, Hovell and others made known the fertility of that part of the colony.

No preceding Governor, and few since, have left such a brilliant record of perseverance, energy, and loyal service to the Crown they represented and the colony they governed. But in carrying out the work he had set himself to accomplish, the achievement of which necessitated indulgences to the emancipated class, Macquarie incurred the deep displeasure of another section led by the military or rather quondam military officers. Their influence though crippled, was still great; and after many bitter battles they secured

the Governor's recall, consequent upon a report by Mr. Commissioner Bigge, who was sent out specially from England to make exhaustive inquiry into every branch of Colonial administration. Macquarie returned to England with the knowledge that, however his enemies might blame him, he had effected a wonderful transformation in the present state and future prospects of New South Wales.

His successor, Governor Brisbane (1821—1825) was sent out to bring into operation a number of reforms suggested by Mr. Commissioner Bigge. Free immigration was to be encouraged as much as possible, in order that the widening lands that were successively made available to settlement by the explorers, might be adequately occupied. The Governor was given an advisory council of seven members nominated by himself, who could neither make laws nor prevent the operation of those he chose to make, but were allowed free expression to their opinion for the benefit of the Colonial Office. A system of law courts was established with a Chief Justice independent of the Governor, and trial by jury was allowed in certain cases. These were all definite steps towards self government, and the "laissez faire" temperament of Brisbane materially assisted the progress of the colony in this direction. General Darling (1825—1831) who followed him was of a firmer character, with the consequence that he quickly became unpopular with the press, headed by "the Australian", a newspaper which had the advantage of William Charles Wentworth's undoubted ability in its conduct. Darling's period of rule was a troublous and an anxious one, and when he was recalled, the fight on behalf of free institutions — freedom of speech, trial by jury, and popular representation — was being waged as keenly as ever.

Sir Richard Bourke, who succeeded Governor Darling, exercised an influence over the warring factions that was both diplomatic and personal, and by the exercise of a great tact no less than by his popularity with all classes, he succeeded in reducing the discordant elements to some sort of harmony. During Governor Darling's regime, in 1828, the Legislative Council of seven members had been increased to fourteen (seven official and seven non-official) with the Governor as President. But all the non-official members were appointed by the Home Government, and the colonists had no voice in the selection of the men by whom they were ruled. Bourke did not receive the credit for many subsequent reforms which he either initiated or suggested, but happily Sir George Gipps who succeeded him in 1837 was a man of the same stamp, and

was thus the right man to continue the good work. In 1842, the long wished for principle of selected representatives was substituted for a council of 36 members, twelve of whom were still nominees, while the other 24 were elected on a property franchise. Full legislative powers and complete control of all colonial revenues except the land fund and a fixed civil list of almost £80,000, were granted to this council. Another reform, and the most wide reaching of all was carried out in Governor Gipps' time by the abolishing of transportation.

This move had been spoken of for some years. The insistent agitation of the Anti-transportationists whose ranks were being continually augmented by the advent of the free settlers, attracted by the policy of assisted immigration, at last impressed the Home Office with the necessity for taking a step, and the report of a Commissioner appointed to inquire into the whole subject decided the matter. An Order in Council issued in 1840 left only two convict settlements in Australasian seas — those of Tasmania and Norfolk Island, and the mainland entered at last upon its inheritance as a free born Colony of the British Empire. Flushed with success in this direction the democrats, led by W. C. Wentworth, Robert Lowe (afterwards Lord Sherbrooke) and others, turned their attention to their ideal of self government, freed altogether from the influence of the Home Office and its representatives in the colony. The constitution of 1842 already referred to had added an elective element to the nominee council, but more was wanted, and in "the forties" the question was in the forefront of Colonial politics sharing importance with the land laws. The latter were rendered necessary by the spread of settlement, and the occupation of the western grazing lands, upon which, as soon as they were made known by the explorers, the squatters "sat down" reserving to themselves acreages so vast that they seemed principalities. These squatters were, despite the extent of their holdings and the prosperity of the pastoral industry, continually complaining about the security of their tenure, and in 1844 Gipps ordained that each run should be licensed separately at a fee of £10 per year. This regulation gave place in 1847 to a system of leasing wherein the lessee held his land free from disturbance during the term of his lease and at its termination could buy what he liked at £1 per acre.

The decade commencing with 1850 was big with promise for Australia — Australia in real earnest now and no longer New South Wales. For by the middle of the century the whole cartographical face of the continent had been changed

and instead of the "twenty counties" round Sydney forming practically the whole settled area of the country, towns had sprung up in remoter parts, stations had been pushed out in all directions along the wakes of the various explorers, and Australia was taking shape as we know it to-day. In 1824 Governor Brisbane searching for a new site for a convict depot had accepted Oxley's recommendations, and the Moreton Bay settlement had been established. As a penal depot it remained until 1840, but with the withdrawal of transportation the era of free settlement began. Even before this time the Darling Downs, that rich belt of pastoral and agricultural land, now fittingly described as the garden of Queensland, had been settled by adventurous pastoralists from the south, and when once the ban that hung over the natural distributing centre of the district — Brisbane — had been removed, the rest was easy, and the Moreton Bay settlement, which in 1850 was still its name, had assumed a definite and ever increasing importance. Two years after the first convicts were landed at Moreton Bay, that is to say in 1826, a military station was established at King George's Sound, partly as a protection to ships on the route from England and partly to frustrate the designs which at that time the French were supposed to have on the coast of Australia. Captain James Stirling's report of the excellence of the country round Swan River had in 1827 excited the interests of theorists in Great Britain. James Peel came forward with an elaborate scheme for the colonising of this supposedly favoured area, and in 1829, Captain Stirling was installed as Governor of the Swan River settlement. The first years of the new colony's life were unmarked by any extraordinary events. Progress was slow and eminently exemplified the vast difference that customarily exists between a theory and its practice. Labour was scarce, and though assisted immigration was instituted, the immigrants only made use of the privileges to get as far as Perth on their journey to the more attractive colonies on the eastern side. In the dilemma brought about by the possession of more than a sufficiency of land without the necessary power to work it, Western Australia petitioned for convicts, and in 1850 the request was granted.

Another experiment originated in England and worked out in Australia was that of Edward Gibbon Wakefield, who propounded a theoretically excellent scheme for the colonisation of South Australia. His idea was to transplant British caste and British formulae into the new land, to create a "leisured class" there and to draw such lines of distinction between the various grades of society as had long

been rubbed out in New South Wales. To effect this consummation he advocated raising the price of land so that it could not be acquired by every man with a few pounds to spare, and abolishing the practice of land grants. On paper the proposition seemed easily workable, and societies were formed to carry out his idea. The Home authorities were induced to take action, and provision was made in 1829 by Parliament for the Colonisation Commissioners for South Australia, which was defined practically as the region between the Murray and St. Vincents Gulf up to the 26th parallel of South latitude. The first emigrant ship arrived in July 1836, and the earlier years of the colony were marked by dissensions among the officers and settlers and by financial troubles which grew steadily more acute until Sir George Grey took over the reins of administration, and the famous deposits of copper at Kapunda and Burra Burra came to light.

Victoria, the most important of the daughter States of New South Wales, was last in point of time to be opened up. Curiously enough, despite the glowing accounts of the country given by Mitchell, Hume and others, settlement was not attracted to the land south of the Murray until the thirties. Then the occupation came not from New South Wales but from Tasmania, from which colony Batman and Faulkner, almost coincidentally, in 1835 selected the mouth of the Yarra as the "place for a village" and began the colonisation of Port Phillip. Expansion followed quickly, but from the first a feeling of antagonism was existent towards Sydney, a feeling which even representation on the Legislative Council of New South Wales did little to appease. Melbourne was founded in 1837, and Bourke himself travelled from Sydney to confirm the laying out of the future capital and of Williamstown. But the residents of Port Phillip remained unsatisfied as long as they were attached to New South Wales, and continued to take strong measures for the accomplishment of separation. It was not until 1850 that their desires were granted, but in that year the Imperial Parliament passed an Act creating the new colony Victoria and conferring upon it a system of self government, the form of which was settled by the New South Wales Legislature.

Tasmania's beginning, like that of Queensland, was due in part to the designs of the French and also in part to the necessity for finding room for the surplusage of convicts sent out to New South Wales. With so inauspicious a birth, it is little wonder that her progress from 1803 was slow, and that a stigma was attached to the name of Van Diemen's Land, as the little island was then called, which it took years

to destroy. This too, although free settlement to some extent was encouraged by the successive Governors and efforts made in other directions to minimise the influence which the extensive criminal population exercised. When convicts were withdrawn from the mainland of Australia in 1840, Tasmania still remained a receiving depot, a condition of affairs naturally very much opposed by the free settlers. The Act of 1850 referred to above, gave Tasmania among the other colonies the right to a Council, two thirds elective, and that body immediately petitioned against having to receive any more convicts. But it was not until 1852 that transportation to Tasmania was abolished, and Western Australia alone possessed the unenviable reputation of being the only Australian colony which had a penal establishment within its boundaries.

The preceding brief record of events connected with the early history and development of Australia brings us to the middle of the nineteenth century. Hitherto as may be judged, progress, both as regards population and production, had been comparatively slow, though for the most part steady, and the expansion of the different colonies had not been remarkable for any extraordinarily swift development. But before "the fifties" had been well entered upon their course, Australians found themselves flung into the vortex of a whirl of exciting events which were destined to change the whole character and career of the country. The last five months of 1851 saw the meeting in four colonies — New South Wales, Victoria, South Australia and Tasmania — of the councils which were to create the modern systems of self government now obtaining throughout in all the six States of the Commonwealth, and the people through their elected representatives had taken up the task of devising a complete Constitution for themselves. Before that task was finished, indeed before it had been well begun, a new element in their life had burst upon them with a suddenness that shattered all preconceived notions of the lines along which they were to travel, and the touch of gold had altered the whole consideration of the problems.

During the convict days more than one pioneer or prospector had found gold in different parts of New South Wales, but fearful of the effects the announcement of the discovery would have upon the community the authorities by coercion or persuasion, suppressed the information. But in 1850, Edward Hargraves, prompted to the search by the similarity in the lay of the country in California and in the Bathurst district of New South Wales, washed out gold in Summerhill Creek, and the disclosure of his find, confirmed

by further prospecting over a district seventy miles long by forty wide, wrought an immediate change. The news spread rapidly, and all classes of the community abandoned the pursuit of their several businesses to join in the more alluring occupation of gold mining. From end to end of the Dividing Range in New South Wales men searched the creeks for gold, and diggers flocked to the Colony from all parts of Australia, eager to participate in the new method of money making. A stream gold seekers set in from Victoria, and Melbourne, alarmed at the depopulation of the new born Colony, offered a reward of £200 to anyone who should find a goldfield within its borders.

Prospecting parties went out immediately and finds were announced in all directions. The first one of importance was Ballarat, where men made forty pounds a day at Golden Point for weeks at a time. In its turn Ballarat paled before the discovery of Forest Creek and later before the almost limitless wealth of Bendigo. The effect was magical. New South Wales was quickly outstripped and the stream returned across the Murray augmented by thousands more. South Australia, West Australia, Queensland and Tasmania, none of whom could afford to lose their men, were drained of their adult population, and from oversea ports, from England, Europe, America, and elsewhere, shipload after shipload of adventurous diggers were landed in Melbourne. "Within three weeks" wrote Governor Latrobe in October 1851, "Melbourne and Geelong have been emptied of many classes of inhabitants. . . . In some of the suburbs not a man was left, and the women for self protection forget neighbours jars and group together to keep house. . . . It really became a question how the more sober operations of society and even the functions of Government may be carried out." Everyone seemed smitten mad with the desire to search for the precious metal. Crops rotted in the ground for want of labour to take them off, sheep remained unshorn, cattle untended, while the infant manufacturing industry languished to the point of extinction. Seemingly the whole of the male adult population of Australia was wielding shovel and wash dish, and society was disintegrated.

And this was not all. The enormous increase to the population of Australia had engendered a serious difficulty in the food supply. Most foodstuffs had doubled in price, bread in Melbourne had risen from 5 d. to 1 s. 8 d. per loaf, while the price on the gold fields was much more. Vegetables were practically unobtainable. But the acuteness of the situation gradually wore away. Farmers and settlers

found that it was almost as profitable and certainly more certain to trade with diggers than to dig oneself. All the colonies therefore began to act as sellers for Victoria, where naturally the greatest gold seeking population was centred. New South Wales provided meat, South Australia grain, and Tasmania vegetables and timber. Gradually trade flowed back to its accustomed channels, the lawlessness that had characterised the early days of the period disappeared, the bushrangers who had sprung into existence with the opportunities that offered for "sticking up" gold escorts were captured or killed, and Australia recovered from her fever and set about the shaping of her destiny as a self governing community once more, with the satisfying knowledge that at last she supported a community of free men untainted by the slur of convictism.

It is safe to assume that the coming of gold materially altered the character of the constitutions that were at the time of its discovery in the process of construction. Previous to 1850 the influence of the pastoralists or squatters had been very marked, and as a large proportion of these men were of what are known as the upper classes of English society, it was inevitable that they should try to preserve some at least of the class and caste distinctions to which they had been accustomed. But when the miners invaded the country, strong democratic element's were introduced, which, consisting of the townspeople and diggers, were likely to demand to the full their rights and privileges. The fate of the suggestion advanced by W. C. Wentworth and others that a Colonial Peerage should be established in order to secure members for the Upper House is an excellent example of this new force in politics. It was met by such a storm of ridicule that it was hastily abandoned, and all that its supporters could secure in New South Wales was a nominee Council.

It was not until 1854—5 that the schemes of self government, which the various colonies were allowed by the Home Government to formulate for themselves, were sent home. They were all very much alike in character. Moulded as closely as was compatible with expediency upon the British constitution, each adopted the bi-cameral legislature — a Lower House or Assembly, and an upper House or Council. The former was the popular Chamber, the members of which were all chosen by the vote of their constituents. In New South Wales the Upper House was made a nominee, while Victoria, South Australia, and Tasmania preferred to make theirs elective, but with a franchise dependent in the case of the first and last named upon a

CROWD LISTENING TO FATHER LONG ANNOUNCING LOCALITY OF FAMOUS SACRED NUGGET
KANOWNA, WESTERN AUSTRALIA, 1898.

larger property or educational qualification. The different schemes, save for some unimportant alterations, were approved by the Home Authorities, and by 1856 the eastern half of Australia assumed the burdens of self government. Queensland still remained an appanage of New South Wales, but the agitation for separation in the Northern colony was strenuously maintained throughout "the fifties". The contest was a prolonged and at times a bitter one, its issue obscured at intervals by the clashing of unrelated interests, but the Home Office at length realised that the greater majority of the people north of Point Danger desired separation, and Queensland, on 10th December 1859, was proclaimed a separate colony with Sir George Ferguson Bowen as its first Governor.

For the colonies, with all their new responsibilities, there yet remained much to be done in the way of exploration, expansion and development. The area of occupied or even known country was very different to what it is to-day. In New South Wales squatters stayed close to the western edge of the great tableland or established themselves on strips of plain adjacent to the Murray and its tributaries. Victoria was "a patch of runs and goldfields between the Gippsland ranges and the mallee country". North of Rockhampton, Queensland had practically no settlement, while a hundred miles of coastal belt between the Glenelg and the head of Spencers Gulf was all that South Australia could boast. Tasmania of course was better circumstanced, owing to its lesser area, and West Australia was its antithesis, possessing only some farms and sheep runs in the Avon Valley, and little else east of the road between Albany and Perth. So that it can readily be understood that the comparative handful of colonies had a weighty task before them. The first step was a more definite subdivision of the continent. The explorations of Leichhardt, Mitchell, Bourke and Wills, together with those of Gregory, Stuart and others, sent out to the succor of the first and last named, added much to the knowledge of the interior. Queensland, was carved out of New South Wales by giving the Northern Colony 29° S. latitude for its southern border, and 141° E. longitude for its western. The Murray already divided Victoria and New South Wales, but the latter colony was curiously shaped on its western frontier. Still belonging to the Mother State was a vast area west of Queensland and north of South Australia, with another strip running down to the Bight between 129° E. and 132° E. In 1861 this strip was added to South Australia, bringing the western boundary contiguous to West Australia's eastern line on the

degree of 129° E. Queensland agitated for the rich lands of the Northern Territory as it is now, but South Australia was by no means anxious to let them go, and in 1863 a compromise was effected, Queensland pushing her western boundary north of the 26th parallel westward to 138° E. longitude, leaving to South Australia the control of the Northern Territory.

It would be impossible, in any brief survey of Australian history, to convey anything like an adequate impression of the kaleidoscopic politics which characterised the records of the years of self government in Australia antecedent to 1860. Each state had its local interests and its local jealousies and conditions of life differing from the others to meet. The most pressing need of all the states was population, and consequently a policy of assisted immigration was inaugurated, Queensland in the early sixties being especially active in this direction. Farmers, labourers, and artisans were introduced from the British Isles and elsewhere in order that the resources might be suitably taken advantage of. But with the consequent increase came the necessity of providing land for the new settlers, and the land laws of each colony were framed to meet the emergency. Repeated trials had to be made and much opposition from the large landholders overcome before a workable system was discovered which would allow the pastoralist to breed his vast flocks and herds and at the same time permit the small farmer or selector as he came to be called, to earn a living from the land. When once that end was accomplished, sooner or later as the case might be in the various states, expansion was steady and at times rapid in the direction of closer settlement. The large holdings of the squatters were cut up into small farms, agriculturists took the place of pastoral enterprise, and the country, or at any rate the coastal belt of it began to support a thriving population in parts which a few years before had been tenanted by a few stockmen or shepherds and utilised for the feeding of sheep. Gradually the hinterland of each State was opened up and late-comers were forced further and further from the coast in the search for land.

In the wake of this development followed the railways which were pushed out westward to serve the needs of the settlers as they opened up new country. Each colonial government in its time paid special attention to this subject, and each was imbued with the immense importance that lay in the linking up of the various districts, giving them a port whence they could ship their produce and a centre whence they could obtain supplies. Though of course it

cannot be said that Australia has an ideal railway system, still much has been done to achieve success, and incalculable good has been wrought by successive ministries in thus cheapening and expediting transit to and from the coast. The result of this policy was most energetically followed in Victoria, where a network of lines overran the country from 1860 to 1880 with the result that this colony quickly became a highly agricultural one, sharing with South Australia the duty of supplying the breadstuffs of the continent. New South Wales remained more of a pastoral colony and took the lead in wool growing and cattle raising, though in the latter Queensland was also active, especially when the more northerly districts and the Gulf country came to be settled. Queensland's North coast districts also exhibited vast potentialities, not yet realised, for tropical agriculture, and much of it yielded very lucrative returns under sugar, which became a staple crop from Bundaberg northward to Cairns and the Johnstone River.

Collaterally with the pastoral and agricultural development of Australia ran the expansion of the mining industry. Victoria extended her gold mines east and west along the main range, New South Wales added silver and copper to her mineral productions and opened up new goldfields in the south and south-east. But Queensland from 1870 onwards was the centre of attraction in this respect. Gympie had been discovered in 1867 and soon it was found that the whole of the main range was worth prospecting. In quick succession goldfields were proclaimed, and by the discovery of the famous Mount Morgan, the richest mine in the world, and the richness of Charters Towers, Croydon, Palmer, Hodgkinson, Etheridge and other fields, Queensland was very soon on equal terms with Victoria in the matter of gold production. But a later rival was to eclipse them both. Gold bearing areas had been discovered in West Australia as far back as 1882, but it was not until after 1890 that her vast wealth in this regard was exploited by the discovery of such immense deposits as those of Coolgardie, Kalgoorlie, and Cue.

The decade beginning with 1890 was one of great moment for Australia. In the first place the autonomy of the six States was completed by the granting of self government to Western Australia in 1890. Before that she had been a Crown Colony, content to progress slowly and to bear the reputation of being behind the rest of the continent in the matter of internal development. But the prospect of becoming a gold producing State changed the community's opinion, and, backed by the rest of Australia, they petitioned

for autonomy. The request was granted, and, as if to justify the concession, the opening of the goldfields trebled the population in five years, and Western Australia became a factor in the policy of the continent. The early nineties were likewise marked by an acute financial strain in the Eastern colonies, commonly known as the banking crisis of 1893. The condition of material prosperity which had characterised each of the colonies up to that time was supposed to be permanent, and in consequence an era of over speculation set in.

Money poured into the colonies for investment, property of all kinds earned a fictitious value, and all classes exhibited the same eagerness to join in the rush for rapid accumulation of wealth. The natural result of all this was a crash, and in the early part of 1893 bank after bank closed its doors while financial institutions of all grades either failed or were compelled to reconstruct. The blow was heaviest in Victoria, but New South Wales and Queensland suffered almost as much, and the effects extended to Tasmania and South Australia. But when the strain had passed, it was acknowledged that the crisis had been a blessing in disguise. Profiting by the lesson, merchants and capitalists, large and small, operated on a much sounder basis, and kept strictly within the bounds of legitimate speculation. The banks were quickly reorganised with a more careful administration and matters began once more to move in their usual groove. The West Australian goldfields with their manifest attractions relieved the distress considerably by providing an outlet for the ruined men who bravely set to work to build their fortunes anew in the golden West, and agriculture and manufacture began to receive greater attention.

But the great movement of the nineties was that which resulted in Federation. Paradoxically as it may appear, the germ of the federal movement is to be found in the separation of the eastern States and their erection into self governing colonies. There had been a measure of reciprocity in the fiscal relations between New South Wales, New Zealand, and Tasmania, ever since the two latter had become separate colonies, and in 1846 Governor Fitzroy made the first recorded suggestion of the need for some central intercolonial authority. In 1847, Earl Grey, in a despatch notifying the separation of the Port Phillip district, outlined a project for union. This project was mildly received by the colonists as unobjectionable or even useful, but not within the bounds of practical politics. In 1849 a Committee of the Privy Council recommended the adoption of a uniform tariff by the Australian

Colonies and the constitution of a body called the General Assembly of Australia to act jointly for the colonies in the matter of fiscal alteration and other topics enumerated in the report. But Earl Grey's enthusiasm was fruitless, and though he made brave efforts towards a basis for union, nothing practical came from them.

But the Federal idea had taken root, and the colonies had not been long governing themselves before suggestions for union came from statesmen both in Victoria and New South Wales, this time to be foiled by Lord John Russell, who was then Secretary of State for the colonies. From 1854 to 1863 isolated Australian efforts were made and select committees on the subject were appointed by the various colonial Parliaments, but the movement went little further. Intercolonial jealousies began to arise, to be accentuated when the tariffs were framed. The disadvantages arising from the disparities of the latter, occasioned many attempts to establish border treaties, commercial reciprocity, intercolonial freetrade or customs unions between 1863 and 1880, and intercolonial conferences were held at intervals. At one of these conferences — that of 1880—1 — a distinct step was made in the Federal movement by the resolution that a Federal Council should be created to deal with intercolonial matters. This council was constituted in 1885 by the passing in the Imperial Parliament of the Federal Council of Australasia Act, but the powers allotted to the council were too scanty to be of much service, and after a somewhat weakly career it expired in 1899.

The question of colonial defence and the necessity for concerted action in this regard provided the stimulus for the Commonwealth Bill of 1891. A conference of delegates from the seven colonies in 1890 recommended the election of a National Convention, and this recommendation was confirmed by the Parliaments of the different States. The first National Australasian Convention "empowered to consider a report upon an adequate scheme for a Federal Constitution" met in Sydney in 1891, and after protracted debate framed the Commonwealth Bill of that year for acceptance by the legislatures of the different states. Federation thus became a definite subject for discussion by the people, and could be analysed as a practical political scheme. It soon became clear that neither the Parliaments nor the people would accept the work of the Convention as final, and the Bill was abandoned after being advanced some stages in the various legislatures. But though abandoned by the Australian politicians, the Australian people persevered and Federation Leagues were established in the principal centres from 1893

to 1898. A popular conference at Corowa in 1893, organised by some of these leagues, affirmed the desirability of again appointing a National Congress to discuss Federation, and a conference of Premiers in 1895 resolved a Bill be introduced into each Parliament sanctioning the election of ten delegates from each colony to a Convention, which should be charged with the framing of a Federal Constitution which was to be accepted or rejected by a Referendum. These Enabling Acts as they came to be called, were passed by all the colonies except Queensland, though Western Australia reserved the right to draw back before the final stage was reached. The elections to this Convention were held in 1897, Queensland alone standing out, and the Convention began its great work in March of that year, at Adelaide. Space will not permit of any detailed reference to its deliberations at its three sittings at Adelaide, Sydney, and Melbourne, nor to the exhaustive debates both in the Convention and in the State Parliaments when the latter were asked to consider the Draft Constitution after the Adelaide session. The final draft was submitted to the electors of the various colonies in June 1898. Queensland still held aloof and Western Australia preferred to wait until the result of the vote in the other four colonies.

In all these four a majority was in favour of the Bill, but in New South Wales the statutory number of votes (80,000) was not polled in the affirmative, and a further delay took place. Negotiations were opened by the mother colony, a conference of Premiers was held at which an endeavour was made to satisfy the demands of New South Wales, and in 1898 the second referendum resulted in New South Wales joining the other three colonies who a year before had accepted the Constitution. Queensland was at last spurred to activity and her electors cast an affirmative vote in September. Addresses to the Queen praying that the Constitution should be passed into law by the Imperial Parliament were promptly adopted, and in 1900 a Federal Delegate of one from each colony was sent home to facilitate the passage of the Bill. While the Bill was still before the House of Commons, Western Australia at last expressed a desire to join the union and provision was made accordingly. At the outset Mr. Chamberlain and the Delegates came into conflict chiefly on the question of Privy Council appeals, but difficulties were eventually smoothed out and on the 9th of July the Royal Assent was given to the Bill. Western Australia held a referendum on the 31st of that month, a decisive vote being cast for Federation, and United Australia awaited with an unbroken front her entry into the lists of

nations. A proclamation was issued fixing the date of that entry for the first day of the twentieth century, and on the 1st January 1901 the Commonwealth was inaugurated at Sydney with great pomp and circumstance.

The first Prime Minister of the new nation was Mr. (now Sir) Edmund Barton, who on his selection immediately gathered round him a very strong cabinet fully representative of each State of the Commonwealth. There was much to be done in the early months of the Commonwealth's existence. By the terms of the Constitution the control of the Customs passed to the Federal Government immediately the Commonwealth was inaugurated, while the Departments of Defence and Post and Telegraphs were taken over as soon as adequate arrangements could be made. A vigorous campaign was initiated by politicians desirous of entering either House, and the elections were hurried forward. When Parliament met in May it was surmised that Mr. Barton could lead a majority in both Houses although in the Upper House his margin of safety was smaller than it was among the representatives. Labour, which had been a distinct force in State politics for quite ten years, was represented by a compact party who gave their support to Mr. Barton on their well tried plan "of support for concessions". What that plan meant was well illustrated by their attitude anent the "White Australia" question.

When the fiscal proposals of the Government were imminent, the labour party made it abundantly manifest that they would have to be appeased in this direction before the Premier could hope to rely on their support in the matter of the tariff. Consequently the Aliens Immigration Restriction Bill and the Pacific Island Labourers Bill were brought down by the Government. The first of these aimed at the exclusion of all undesirable immigrants, its prohibitory nature hinging on its similarity to the Natal Act. A language test was imposed, the ability to write 50 words of any European language being insisted on before admission to the Commonwealth. It was first intended to make the test solely in the English language, but several members laid emphasis on the fact that this would exclude such eminently satisfactory colonists as the Germans and others, and on these representations the European language was substituted. The Pacific Island Labourers Bill was designed to do away with the employment of South Sea Islanders, or Kanakas as they are called, upon the sugar plantations of Queensland and New South Wales, and though several members spoke earnestly against it, the mind of the united Parliament was evidently made up that the Kanaka must go. Both these Acts became law in 1901.

While both these Bills were before Parliament in some form or other, the long expected tariff was laid on the table of the House, and Sir George Turner, the Federal Treasurer, delivered his budget speech on the 8th October 1901. As was expected the tariff was protectionist in character, a fiscal policy of that nature being imperative in order to meet the requirements of the Constitution. The freetrade party in the House however, maintained that the protectionist element in it was far too strong for the requirements, and set themselves to work to reduce or modify duties in all directions when the matter arrived at the Committee stage. Many changes were effected in the direction of lessening the protective incidence of the tariff even in the Lower House, and when it finally left the popular Chamber the Senate also insisted on alterations. From its introduction to its eventual sanction very nearly twelve months were expended on the tariff, and the Customs Duties Bill was read a third time in the Senate in September 1902. Opinion on it have been variously expressed, but it has obviously had the effect of stimulating the manufacturing industry and thus adding a new or rather larger producer of wealth to the Australian States.

In connection with the Customs Act a disagreement arose between the Federal administration and the shipping companies which at one time seemed likely to involve international complications and which even yet remains undecided. In the Act oversea ships are forbidden to break the Customs seals set on their stores while sailing between ports on the Australia coast, the object being to prevent the advantage oversea ships would have over coastal steamers in this regard, seeing that the greater cheapness of foodstuffs on board the former would enable them to compete successfully against the latter in the matter of passenger carrying. It was contended by the shipping companies that the Australian law could have no effect on the high seas and that whatever acts were done in the passage between port and port could not be affected by the Commonwealth jurisdiction. This contention was recognised as having more weight in respect to the foreign companies trading to Australia — such as the Norddeutscher Lloyd and Messageries Maritimes — but the British companies also took exception to it and both classes came into collision with the Customs administration. A compromise was at length effected and the matter is now before the Privy Council.

Altogether the first session of the Federal Parliament lasted 17 months — from May 10th 1901 to October 10th 1902

The work done in addition to what has been mentioned above was mainly connected with machinery measures, necessary to set the Australian Commonwealth in motion. The task was admittedly a gigantic one, and though critics throughout the country have expressed more or less emphatically their disapproval of the amount and the manner of the business carried out, it is doubtful whether any administration could have succeeded in pleasing all sections of the community. Parliament did its best and its members laboured earnestly to achieve what in their individual and collective opinion was best for their country. Time alone can show whether they acted wisely to that end.

Outside the federal and political arena, the record of Australia for the past ten years has been one of steady development, unmarked by any extraordinary epoch-making incidents, but at the same time full of interest. After the check received by the financial crisis in 1893, the States, each in their own way, set to work to rebuild their house, choosing a surer foundation and using more care than had previously been the case. Commercial operations, in the broadest sense, were characterised by an evident desire to profit by the lessons of the past, and proceed in the future along lines which, though perhaps less attractive, were more certain and safe. The result has been abundantly manifest in the stability with which the serious injury done by the drought of 1901—2 has been met. Despite the very widespread influence of the abnormally dry seasons of these years, the curtailment of profits entailed thereby, and the actual restriction in the spending power of the community occasioned by its operations, business generally has been sound, and business failures, comparatively speaking, few and far between. Imports and exports from to various States, have on the whole maintained their level, though in some as for example Queensland and New South Wales, the drought has caused a shrinkage in the values and quantities. Internal development has been steady, and dairying and agricultural industries have displayed a strong tendency to expand, and the latter's expansion has been such that before long Australia bids fair to become wholly self supporting in the matter of foodstuffs. On the outbreak of the war in South Africa in 1899 the various Australian States were swept by a wave of loyalty to the Mother country, which, combined with an appreciation of their responsibility to the Empire, resulted in the despatch of several contingents to the arena of hostilities. The Australian troops acquitted themselves admirably in the field and their presence there was recognised as an earnest desire to take

up the burden of nationhood upon which state they had just entered.

In the foregoing brief review of the history of Australia, much that is interesting and instructive in the record of development has been of a necessity omitted. The exigencies of space prevented anything more than a reference to the salient points of the history of the youngest nation, which might serve as finger points to a more detailed study — a study which, be it said, would amply repay the student. It has been said that Australia has no history. If history means the chronicle of campaigns, the life and death struggle of men against men, then the platitude is true. Australia's conquests have of a truth been bloodless, her wars have been waged more against the forces of nature arrayed against her pioneers, but they have been none the less real, they have taken their toll of the hardy adventurers who cheerfully laid down their lives for the sake of the future greatness of their country. And now that she is emerging from the struggle stronger, more selfreliant, and better fitted to grapple with the many problems she has still to face, those who have watched her attain this consummation, have helped her to accomplish these ends, look forward with a cheery optimism to the future, strong in the knowledge that her strenuous past has trained her people to meet and overcome whatever obstacles fate has still in store.

BIBLIOGRAPHY.

No less than 30,000 books in the Sydney Free Public Library treat solely on Australian subjects, and it would be a difficult task to offer any advice as to the best literature on any particular branch of knowledge. For ordinary purposes T. A. Coghlan's "Australia and New Zealand", a Government publication, which contains besides the most reliable statistics, much interesting general information, may be recommended. The "Year-Book of Australia" and the "Australian Handbook" — both non official — also contain detailed statistics etc., and are popular books of reference.

CONSTITUTION OF THE COMMONWEALTH.

As in all self governing colonies of the British Empire the constitution of the Australian Commonwealth adheres as closely as possible to the Imperial model. The Governor

PICNIC POINT, FLINDERS
SOUTH COAST OF VICTORIA.

General, as the Vice Regal representative, exercises the powers — or rather some of the powers and privileges enjoyed by the Sovereign — and the Parliament is bi-cameral, the two houses standing for the House of Lords and the House of Commons. The democratic attitude of Australia however, prevented the framers of the Constitution making the Upper House either an hereditary or a nominated one, even had they wished it, and in consequence both Houses are elective. The franchise is practically based on the principle one adult one vote, and women enjoy equal political privileges with men. These privileges were conferred upon them by the Federal Parliament itself, and it must be remembered that, except in South Australia, where the female franchise was already in operation women had no voice in the selection of the first Commonwealth Government.

The Governor General. The Governor General is appointed by special commission under the Royal Sign Manual and Signet, which commission recites the Letters Patent under the Great Seal and directs the newly appointed Governor to fulfil the duties of his office according to the permanent instructions issued in connection therewith. The permanent Letters Patent constituting the office of Governor in each colony defines the duties of the Vice Regal representative, enables him among other things to appoint an Executive Council, Judges, Commissioners, Justices, Ministers and others; to grant pardons to any offender and to remit fines and forfeitures; to summon, prorogue, and dissolve any legislative body in the Commonwealth. Under the instructions he is enjoined to summon and preside at meetings of the Executive Council and to consult such Council in such cases except matters of extreme urgency; to assent to or dissent from or reserve for the King's pleasure such Bills as may be passed by the Federal Parliament, subject to certain rules and regulations, the bills which he is compelled to so reserve being specifically mentioned. In the execution of the powers and authorities vested in him the Governor General is guided by the advice of his Executive Council. Under the Constitution itself however, a number of powers are conferred upon the Governor General which he may exercise without consulting the Executive Council. Such powers include summoning, prorogueing and dissolving the Federal Parliament, convening a joint sitting of both Houses, recommending amendments in proposed laws, exercising as the King's representative the Executive power of the Commonwealth and other prerogatives of the Crown. These powers are however never exercised unless "by and with the advice of the Executive Council".

The Executive. "The Executive authority of the Commonwealth includes all the discretionary or mandatory acts of government which can be lawfully done or permitted by the Executive in pursuance of powers vested in it or of duties imposed upon it partly by the Constitution and partly by Federal legislation. Generally described, the powers and duties of the Federal Executive Government relate to the execution and maintenance of the Constitution and the execution and maintenance of the Laws of the Federal Parliament passed in pursuance of the Federal Constitution." The Federal Council is usually presided over by the Governor General. Following the time-honoured custom of the Imperial Parliament, the Cabinet must be selected from members of the legislature holding the same political views, carrying on a concerted policy, under a common responsibility to be signified by a collective resignation in the event of a parliamentary censure, and acknowledging a subordination to one chief minister. Until the Parliament otherwise provides, the Ministers of State, who with the Governor General constitute the Federal Council, shall be seven. These ministers, as departmental heads, administer the Constitution and the Federal legislation, and one of them is responsible to Parliament for every executive act of the Governor in Council. As usual the majority of them sit in the Lower House of the legislative, only one at present representing the Government in the Upper House, of which however the Vice President of the Executive Council, who holds no portfolio, is also a member. The functions of the Executive Council are generally explained in the quotation which commences this paragraph and are defined partly by the Constitution itself and partly by the Federal Parliament.

The Legislature. The Senate or Upper House of the Federal Legislature is designed to afford equal representation to the six states forming the Commonwealth of Australia. Each of these States voting as one constituency elects six senators, and though Parliament may make laws increasing or diminishing the number of Senators, it must preserve the equal representation, and no original State must have less than six senators. While the feeling of the Australian people and politicians was strongly averse to making the Senate a nominee chamber, it was realised that the body should possess more stability than the Lower House. In consequence the constitution provides that the senators shall be elected for a term of six years. To further ensure the continuity of the Chamber, a scheme of rotation was devised whereby half the number of senators retire at the

end of three years from the date of the first election or from the date of the dissolution of the Senate. The latter can only take place in the case of a protracted disagreement between the two houses and will probably never eventuate. But the retirement of half the number of Senators at the end of a three years term, while preserving the permanency of succession, provides for an infusion of new blood or restored vitality every three years in perpetuity. The qualification both of a Senator and of the constituent who elects him are the same as those which obtain in elections to the House of Representatives. The Senate cannot originate bills appropriating revenue or imposing taxation nor may they amend such laws, but may return them to the House of Representatives requesting omission or amendment in them. Otherwise the Senate has equal powers with the House of Representatives in respect of all proposed laws. According to precedent, money bills must originate in the Lower House or popular Chamber.

A population basis has been adopted with regard to the number of members to which each State is entitled in the House of Representatives. As nearly as possible the House of Representatives must be twice as large as the Senate and no original State shall have less than five members. Calculations made for the present Parliament fixed the number of representatives at 75, distributed as follows: — New South Wales 26; Victoria 23; Queensland 9; South Australia 7; West Australia 5; and Tasmania 5, and this distribution was embodied in the Constitution Act. As the populations of States grow larger in proportion to the others — an event which is most likely to happen in Queensland and Western Australia — such States will be entitled to a larger representation as may be provided by Parliament. The duration of the House of Representatives is limited to three years from its first meeting, but it may be sooner dissolved by the Governor General in Council. The Electoral Act passed in the first session of the Federal Parliament defined the electoral divisions for each State and established a residential qualification for the electors, such qualification being of the democratic nature so noticeable in Australian politics at the present day. During the same session another act conferred the franchise upon women. A member of the House of representatives must be of the full age of twenty one years and must be an elector entitled to vote, and must have been for three years at least a resident within the limits of the Commonwealth. He must be a naturalised or national born subject of the King and must make the oath of allegiance before taking his seat. He becomes disqualified

by swearing allegiance to any foreign power, by being attainted of treason, convicted of any offence punishable by imprisonment for one year or longer, becoming a bankrupt or insolvent, holding any office of profit under the Crown or having any pecuniary interest with the Public Service of the Commonwealth otherwise than as a member of an incorporated company consisting of more than twenty five persons.

The powers, privileges and immunities of the Senate and House of Representatives shall be such as are declared by Parliament. Members of each House receive a remuneration amounting to £ 400 during their term as senator or representative.

Powers of the Parliament. The legislative powers of Parliament though they do not cover everything and leave to the State House a fair share of the public business of Australia, are nevertheless somewhat extensive. By clause 51 of the Constitution the subjects upon which the Federal Parliament may legislate are defined as follow: — (1) Trade and commerce with other countries and among the States. (2) Taxation, but so as not to discriminate between States or parts of States. (3) Bounties on the production or export of goods. (4) Borrowing money on the public credit of the Commonwealth. (5) Postal, Telegraphic, Telephonic and other like services. (6) Naval and military forces of the Commonwealth. (7) Lighthouses, Lightships, beacons and buoys. (8) Astronomical and Meteorological observations. (9) Quarantine. (10) Fisheries in Australian waters beyond territorial limits. (11) Census and statistics. (12) Currency coinage and legal tender. (13) Banking, other than State Banking, also State banking extending beyond the limits of the State concerned, the incorporation of banks and the issue of paper money. (14) Insurance other than State insurance; also State insurance extending beyond the limits of the State concerned. (15) Weights and measures. (16) Bills of exchange and promisory notes. (17) Bankruptcy and insolvency. (18) Copyrights, patents of invention and designs and trade marks. (19) Naturalisation and Aliens. (20) Foreign corporations and trading or financial corporations formed within the limits of the Commonwealth. (21) Marriage. (22) Divorce and matrimonial causes; and in relation thereto, parental rights and the custody and guardianship of infants. (23) Invalid and old age pensions. (24) The service and execution throughout the Commonwealth of the civil and criminal process and the judgment of the courts of the States. (25) The recognition throughout the Commonwealth

of the laws, the public acts and records, and the judicial proceedings of the States. (26) The people of any race other than the aboriginal race in any State, for whom it is deemed necessary to make special laws. (27) Immigration and Emigration. (28) The influx of criminals. (29) External affairs. (30) The relations of the Commonwealth with the islands of the Pacific. (31) The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws. (32) The control of railways with respect to transport for the naval and military purposes of the Commonwealth. (33) The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State. (34) Railway construction and extension in any State with the consent of that State. (35) Conciliation and arbitration for the prevention and settlement of industrial disputes beyond the limits of any one State. (36) Matters in respect of which the Constitution makes provision until the Parliament otherwise provides. (37) Matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliaments the matter is referred or which afterwards adopt the law. (38) The exercise within the Commonwealth at the request or with the concurrence of the Parliaments of all the States directly concerned of any power which can at the establishment of the Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia. (39) Matters incidental to the execution of any power vested by the Constitution in the Parliament or in either House thereof or in the Government of the Commonwealth, or in the Federal Judicature or in any department or any officer of the Commonwealth. In addition the Parliament has exclusive power to legislate with regard to the Federal Capital and matters relating to any department of the public service, the control of which is transferred to the Commonwealth. At so short a time after its inception it is of course impossible to expect that the Federal Government should have assumed control of all the subjects specified above. So far the Commonwealth has only taken over the administration of customs and excise, which indeed passed over automatically on the day of inauguration and departments of post and telegraphs and defence which were transferred by proclamation soon afterwards. Provision is made in the Constitution where by the control of light-houses, beacons and buoys and of quarantine may also be taken over by proclamation without further legislative

enactment. Other subjects such as Immigration, External Affairs, Legal Service (in part), the acquisition of State property have likewise been dealt with and attempts were made during the first session to pass legislation on bounties, conciliation and arbitration while others on the list are to be dealt with later on.

FINANCE AND TRADE.

Perhaps the most debated clauses of the Constitution of the Australian Commonwealth were — and are — the provisions under the chapter heading "Finance and Trade". On the imposition of the Federal Tariff, the power of the Parliament to impose duties on customs and on excise and to grant bounties on the production and export of goods becomes exclusive. But with regard to the latter it is provided that "nothing in the Constitution prohibits a State from granting any aid to or bounty on mining for gold, silver or other metals, nor from granting, with the consent of both Houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods. For a period of 10 years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, not more than one fourth of the revenue from customs and excise shall be applied annually to Commonwealth expenditure and the balance of three fourths must be repaid to the several States. The Constitution provides for the appointment of an Interstate Commission for adjudicating on and administering the provisions relating to trade and commerce, and of all laws made thereunder. The members of the Commission are to be appointed for seven years.

THE JUDICATURE.

Though so far little has been done towards following out the provisions of the Constitution relating to the Federal Judiciary, those provisions lay down the law for a complete judicial system. During the first session of the Federal Parliament a High Court of Australia Procedure Bill was introduced, but no time was pleaded in excuse for its not being gone on with. Under the Constitution such court shall consist of a Chief Justice and as many other Justices (not less than two) as the Parliament prescribes. The High Court shall have jurisdiction to hear and determine appeals

from all judgments, decrees, orders, and sentences (1) of any Justice or Justices exercising the original jurisdiction of the High Court, (2) of any other Federal Court or court exercising federal jurisdiction, or of the Supreme Court of any State or of any other court of any State from which an appeal lies to the King in Council, (3) of the Interstate Commission, but as to questions of law only. The much disputed clause 74, which occasioned such warm debate between the Federal Delegates and the British Crown Law officers when the Constitution Act was before the Imperial Parliament, provides that no appeal shall be permitted to the King in Council from a decision of the High Court upon any question howsoever arising as to the limits inter se of the Constitutional powers of the Commonwealth and those of any State or States or as the limits inter se of the Constitutional powers of any trio or more States unless the High Court shall certify that the question is one which ought to be determined by His Majesty in Council. "The High Court may so certify if satisfied that for any special reason the certificate should be granted and thereupon an appeal shall lie to His Majesty in Council on the question without further leave. Except as provided in this section, the Constitution shall not impair any right which the King may be pleased to exercise by virtue of His Royal Prerogative to grant special leave to appeal from the High Court to His Majesty in Council. The Parliament may make laws limiting the matters in which such leave may be asked, but proposed laws containing any such limitation shall be reserved by the Governor General for His Majesty's pleasure."

THE STATES.

Subject to the Constitution, the State Constitutions remain unimpaired and every power of the State Parliaments, except when altered by the Constitution, is preserved to them. If however, the law of a State is inconsistent with a law of the Commonwealth, the former prevails over the latter to the extent of the inconsistency. The States may not raise forces, tax the property of the Commonwealth, nor coin money, and the Commonwealth is forbidden to legislate in respect of religion. New States may be admitted into the Federation, and a State may, with the consent of its Parliament, be subdivided into two or more States and vice versa, or two or more States or Departments of States may be formed into a new State with the consent of the Parliaments of the State affected.

DEFENCE.

The action of Australia in despatching some thousands of men to take part in the war between Great Britain and the South African Republics has attracted increased attention to the subject of Australian defence, and inquiries are now being made by military men regarding conditions prevailing in this branch of a nation's life. It may at once be said that Australia has no standing army as that phrase is understood in the Old World. A small "permanent force" known as the Royal Australian Artillery is maintained, chiefly for the care of the fortifications and the military apparatus acquired by the Commonwealth, but the main strength of Australia in time of war would be drawn from her citizen soldiery. Just at present, matters military are in a transition stage. The Federal Government took over the control of the Defence Department in 1901, and an effort was made during the Parliamentary session of that year to pass a Defence Act, bringing the different State systems into uniformity. The attempt failed however, and at present some confusion is the consequence. The greater portion of the forces consist of militia or partially paid troops and volunteers, but the latter arm is not considered altogether satisfactory and is being absorbed into the militia. The strength of all arms in Australia may be set down as approximating to 30,000 men on a peace footing, but this number would be largely increased in the event of war by the enrolment of all able bodied men under the provision of the State Acts which will certainly be embodied in the Commonwealth Defence Act when the measure is again before the House. In addition to this number, the rifle clubs, which are strong in the various States and the reservists of New South Wales and Victoria considerably augment the number of men who have had a complete or partial military training. The principal arms of the service include Artillery, Engineers, Submarine Miners, Cavalry, Mounted Infantry, and Infantry. Of these, an arm which Australia has made its own is the Mounted Infantry division. This description of a fighting corps is much commended, combining as it does the mobility and quick transit of cavalry with the usefulness of infantry. Mounted Infantry only use their horses in moving from point to point and go into action as infantry pure and simple. The Cavalry arm is not extensively patronised, there being only about 1,500 men enrolled in it throughout the whole of Australia. To all intents and purposes the naval defence of Australia is in the hands of the Imperial Fleet which supplies two squadrons united

under the command of a Rear Admiral. The "ships" on the Australian Station" are quite distinct from "the Australian Auxiliary Squadron". The former are wholly in the British navy, while the latter are extensively subsidised by the Federal Government. In the first named are eight vessels, the flagship at present being the "Euryalus" a first class armoured cruiser of 12,000 tons displacement and a speed of 21.5 knots. The Auxiliary Squadron consists of seven ships — five fast cruisers and two torpedo gun boats. The cruisers are all of 2,275 tons displacement, having an indicated horse power of 7,500 and a speed of 19.2 knots, their chief armament being eight 4.7 quick firers, eight 3 pr. quick firers, four 5 barrel Nordenfeldt and four torpedo tubes. The two torpedo gun boats are sister ships of 725 tons each, an indicated horse power of 3,500 and a speed of 19 knots. Two 4.7 O. F., four 3 pr O. F., and 3 torpedo tubes constitute their armament. Victoria, Queensland, and South Australia before Federation each had in commission one or more gun boats or torpedo boats, but for the most part these are not formidable. The coastal defence of Australia is represented by strong fortifications at the principal ports, and aided by natural advantages, Sydney and Melbourne would offer a very powerful resistance to a hostile fleet.

POSTAL AND TELEGRAPHIC.

Now that the Postal arrangements of Australia are under the control of the Federal Government a measure of uniformity has been achieved. The Postal Department is administered from Melbourne and the administrative staff is a small one. Each State has its own deputy Postmaster General, who is under the authority of the Federal Postmaster General, but is empowered to take action on his own initiative concerning matters of detail in connection with his own department. The Deputy Postmaster General practically controls the large State staff subject of course to the Federal Postmaster General. The partial settlement of many parts of Australia naturally militates against a frequency and in some cases a continuity of mail delivery, and the climatic conditions of the interior sometimes prevent the postal service being conducted with anything like regularity — that is of course in places where coach or horse service has to be depended upon. But elsewhere the postal arrangements of the Commonwealth are satisfactory enough, both externally and internally. A regular mail service leaves weekly for Great Britain and Europe via the Suez Canal, the P. and O. and

Orient Pacific alternating their fortnightly departures to maintain it under a subsidised contract with the Government. In addition the Norddeutscher Lloyd and the Messageries Maritimes Companies afford further mail facilities for the Old World. In the case of letters being sent by the vessels of these Companies however, they must be superscribed "per German steamer" or "per French steamer" as the case may be. The time of transit of mails by this route averages 33 days from Sydney, 31 days from Adelaide, and 28 days from Western Australia, but it is no uncommon thing for mails from Sydney to be delivered in London 32 days after their despatch from Sydney. Two services are maintained, via the Pacific across the continent of North America and the Atlantic, by vessels whose port of arrival in America is either Vancouver or San Francisco, the despatch in the case of the former taking place every four and in the latter every three weeks. From 35 to 37 days is the average time employed in transit, but here again this average is frequently reduced by the steamers on both lines. Correspondence by these routes must be marked "via Vancouver" or "via San Francisco" as the case may be. Regular lines of fast steamers available for letter carriage run between Australian ports to China, Japan, and other Eastern countries, and whenever opportunity offers mails are made up for conveyance by steamers leaving for South Africa, South America, and other parts of the globe. Each State publishes a daily table giving full information regarding the despatch of mails, and publicity is also given to the time of arrival of the same. Within the Commonwealth the letter rates are generally 2 d. for every $\frac{1}{2}$ oz., while penny postage is in operation within nearly all the urban areas. Postage to countries beyond the Commonwealth is charged at $2\frac{1}{2}$ d. per the half ounce for letters. Newspapers are charged at 1 d. for the first four ounces and $\frac{1}{2}$ d. for every additional two ounces, when addressed to places outside Australia. Letters may of course be registered in all the States. A postal guide is issued for each State containing full information on all subjects dealt with by the Department.

Altogether five cables connect Australia with the Old World, three of which junction with the main Asiatic lines, one has been recently laid via South Africa, and the fifth has still more recently been opened for traffic via Canada. The history of the cable communication of Australia is interesting, especially in its later developments, and there seems a prospect of further changes being shortly effected. Considering its partially settled state, Australia is well equipped in the matter of internal telegraphs, and "the

wires" now extend to every corner of the continent, the total length of lines at the end of 1903 amounting to 45,140 miles. There are over 3,000 telegraph stations in Australia, and the number of telegrams passing over the lines in 1903 exceeded 11,500,000. No country has shown such rapidity in telegraphic development, or such a disposition on the part of the public to take advantage of the opportunities offered. For ordinary telegrams not exceeding 16 words, including address and signature, the rates throughout Australia are now fixed at 6 d. in town and suburban districts, 9 d. to other places within the State, and 1/- for Interstate messages. Telephone exchanges have been established in all the capitals and most of the principal towns of the Commonwealth, and in some cases long distance wires are in operation.

CURRENCY.

The English sovereign is the sole recognised currency in Australia, the silver and copper coins being more properly considered as tokens. Bank notes are not legal tender in any State and do not circulate beyond the State in which they are issued. Queensland alone has a legal paper currency in the shape of treasury notes.

The total value of coin circulating in Australia is about £ 5,500,000 in gold, £ 1,000,000 in silver, and £ 100,000 in copper.

The only coins minted in Australia are of gold, and the value of gold coinage issued from them in the year 1903 were as follows: Sydney, £ 2,921,500; Melbourne, £ 3,521,780; Perth, £ 4,674,783; total £ 11,118,063.

TRADE AND COMMERCE.

Perhaps no country in the world can equal — certainly none can excel — Australia's record of commercial development within the comparatively short space of national life she has so far left behind her. No more than a century ago the Commonwealth of to-day was represented by a few bare little settlements, mainly with only intermittent intercourse, situated on the eastern shore of the continent. The bulk of the population was centred round Sydney and its harbour, flanked by a few scattered homesteads at Parramatta, Windsor and other localities that are now considered suburbs of the busy metropolis of New South Wales. Fed and clothed from Government stores, depending in great part on

importations from the mother country for even the necessities of life, possessing a commercial connection with the outside world that was of the slightest, Australia has from year to year, from decade to decade, pushed forward, expanding in all directions both internally and externally, testing and approving foreign markets in every quarter of the globe, establishing business relations in widely separated regions, placing her products at the disposal of all peoples, and receiving in return commodities whose places of origin lie half the circumference of the globe away. It is a record of which her citizens may well be proud, a victory won, not by the expenditure of blood and treasure, but by steady unremitting labour, strenuous endeavour, and the constant application of that keen commercial instinct that her sons inherited from their British fathers, and have turned to the best account in the new environment where they have made their home. Born amidst unpropitious surroundings, nurtured under conditions that were the reverse of favourable, the commerce of Australia safely emerged from an infancy which might well have been irrevocably warped, into a strong and lusty manhood. As soon as the stigma which darkened the early days had been removed, the colonies of Australia that had suffered under it entered upon their heritage as communities that were "free" in every sense of the word, the progress began that has never been stayed since. Slow and insignificant at first, the trade returns of the early years with their totals in thousands looking almost ludicrous in comparison with the millions of to-day, the commerce of Australia received its first great impetus, as did everything else from the days of the gold diggers when the whole country was in a ferment of excitement and miners or would be miners poured into the land in shipload after shipload. These had to be clothed and fed, their wants in all directions satisfied, and the demands which set in then have been continued and augmented to the present day. When the gold fever abated and men turned their hands to other pursuits, quieter but less lucrative, they still required that attention. Their numbers were swelled by the immigrants who sought in the new land the means denied them in the older centres of civilisation. Wave after wave of hardy pioneers swept inland, reclaiming the desert places, settling down to pastoral pursuits, and turning the wilderness of forest, plain and mountain into a smiling land of plenty. Instead of being peopled by a wandering tribe of aboriginals, the vast interior areas were occupied by flocks and herds from whose backs and bodies came the produce that still remains the backbone of Australia's commerce. Along the coastal belt at first, and

**GREAT BOULDER MINE, KALGOORLIE
WESTERN AUSTRALIA**

later over the ranges, farmers began to till the ground and turn its unproductiveness into wealth. And so the tale runs on until at last. Australia now holds the proud distinction in possessing a trade that on a per capita calculation excels in magnitude that of any other civilised country of the globe.

MINING.

Ever since the golden days of the fifties when Australia realised that her territory was rich in the precious and baser metals, when miners exploited the land in all directions, and the continent leapt into prosperity, the mining industry has been a very important factor in the economics of the various States. Nearly all the principal metals of a commercial value are to be found in the different parts of Australia, and in one direction or another metals or minerals are responsible for the great increase in the wealth production of each State. Four out of the six States of the Commonwealth owe much of their present important position to the discovery and exploitation of their gold bearing areas. The three Eastern States for example, all received their impetus when the gold was found, and Western Australia particularly, though in more recent years, has to thank the precious metal for her augmentation of population, wealth, and general importance. It is that State which now heads the list in the matter of gold production, having in the last few years completely outdistanced her sister competitors. Queensland and Victoria are the nearest rivals, and these two States produce practically the same amount of gold each. But Queensland in this direction has greater undeveloped resources than Victoria, and the slight lead she has established will undoubtedly be increased as the gold bearing areas are brought into development. From the date of its first discovery, gold to the value of nearly 460,000,000 pounds sterling has been produced from Australia, and of this total nearly 260,000,000 sterling represents Victoria's contribution. In the Mount Morgan mine Queensland possesses one of the mineral wonders of the world, and this single mine has already paid nearly six million sterling in dividends alone, while recent discoveries have indefinitely prolonged its life. The leading silver mines of Australia are in New South Wales, the principal centre of production being at Broken Hill on the western border of this State, and the group of mines there are of immense potential value. Though South Australia was in the past noted for her deposits of copper, Queensland promises to dispute her productiveness

in this respect. The copper lode deposits in the north of the State have proved of immense extent and value, while Tasmania has a very rich mine, in fact on present data the largest and most productive in Australia. Tin occurs in all the States, Tasmania being again the largest producer, but on geological grounds it may be assumed that Queensland and the Northern Territory will take the lead in the future. Want of capital has prevented the development of the iron fields of Australia, although it is known that large deposits exist throughout the States. This lack of capital is, however, not the case with regard to coal, the carboniferous area of Australia being very large indeed, especially in New South Wales and Queensland. Indeed black coal forms one of the principal resources of the former State, and its second town, Newcastle, is almost wholly dependent upon coal mining for its existence and maintenance. There are many other metals and minerals now being produced in Australia, and in view of the fact that much of her area has not yet been prospected, it may safely be asserted that her mineral wealth is capable of great extension. Indeed the opinion has been frequently expressed that the development of the deposits of various minerals except gold has only reached the first period of their exploitation, and future generations may see in the Commonwealth one of the richest mineral countries of the world.

AGRICULTURE.

Except in Victoria and to a lesser extent in Tasmania, agriculture in Australia cannot be said to have advanced beyond the first phase, and, broadly speaking, intense cultivation is not practised outside those two States. Stretching over so many degrees of latitude as it does, the continent offers facilities for almost every description of agriculture from the purely tropical products of the North of Queensland, to the fruits and vegetables of the temperate zone grown in Tasmania. The growing of cereals occupies the principal attention of the farmers of the Commonwealth, and the area under wheat and other grain crops is considerable. In normal seasons, all the States except Queensland and Western Australia produce a sufficiency of wheat for their own consumption, and there is usually a surplus remaining for export in South Australia, Victoria, and New South Wales when local requirements have been satisfied. The principal wheat growing States, judging by the area under that crop, are South Australia and Victoria, but New

South Wales has made great strides in the last few years, the Riverina district of that State having proved especially suitable for this grain. But it must be remembered that even now the States cannot compare in the amount of their production or the yield per acre with the great wheat growing countries of the world, and it is very evident that much more will have to be effected before Australia can enter into serious competition with them. Oats, maize, barley, and rye in that order are also grown, the two former extensively, while hay is really the principal crop of Australia, returning 25 per cent of the total value of agricultural production. Along the coast of Queensland and in the northern districts of New South Wales the rich scrub lands have been found excellently suitable for the growth of sugar cane, and the further north the fields are, the better are the yields and the sugar contents of the cane. Practically however, Queensland has the monopoly in the manufacture of sugar, the output of the New South Wales mills being only about 25,000 tons in 1901 against the 95,000 tons made in Queensland. The average production for the last ten years was over 127,000 tons per annum, of which Queensland produced over 104,000. Now that Australian wines are receiving such favourable attention in Europe, it is possible that the cultivation of the vine will be prosecuted with more vigour than has hitherto been the case. Victoria and South Australia are the two States which have the greatest area under vine cultivation, but all the States are increasing their areas in this direction though the progress so far has not been very marked. In 1901 Australia produced five million gallons of wine, of which four million came from Victoria and South Australia. Of this about 850,000 gallons were exported, the remainder passing into local consumption. During the year 1903 wine to the value of £98,000 was exported to countries outside the Commonwealth. As in other agricultural respects, Australia so far compares very unfavourably as a wine producer, especially when the suitability of its soil and climate are taken into consideration, with the other wine producing countries of the world. A very fair grade of tobacco leaf is grown in the three Eastern States of the mainland, but its preparation has not been such as to commend it to European manufacturers. Efforts however are being made by the Queensland Department of Agriculture to remove the prejudice at present existing against Australian leaf, by importing American seed, and, like Victoria and New South Wales, employing an expert to assist the farmers. And this instance brings one to the consideration of one of the most gratifying phases of agricultural development in

Australia. The Governments of the various States have of late years made great efforts to secure an adequate dissemination of agricultural knowledge, and to persuade the farmer to abandon the old rule of thumb methods for more scientific practises. To this end Agricultural Colleges for the teaching of such scientific methods, have been established and are much patronised, experts have been appointed to travel round the country and give the farmers the benefit of their experience and their knowledge, experimental farms have been inaugurated affording many useful object lessons, and, furthermore, most of the States have adopted legislation sanctioning the advance of public money to farmers on the lines of the French "Credit Foncier". When these laudable efforts have achieved their legitimate end, Australian agriculture will take up its true position as a wealth producer, and, it is not to much to assume, will rival if not excel from every point of view the pastoral industry.

THE PASTORAL INDUSTRY.

Since its inception the pastoral industry has in all its numerous ramifications been the mainstay of Australia. For many years it was practically the only resource, and though of late agriculture, dairying and mining have become its worthy competitors, it still remains at the top as a money producer. The pastoral resources of the Commonwealth are stupendous, and she is very far from having reached the limit of her capacity in this direction even at the present day. Soil, climate and indigenous herbage are alike eminently suitable for the maintenance of animal life, and in the past, advantage has been taken of the wealth of these natural resources though perhaps to a lesser degree than might have been the case. The most important branch of the pastoral industry is sheep breeding and wool growing, a branch that has reached its highest point in the Northern State. Out of the seventy-two million sheep in Australia and Tasmania at the end of 1901, New South Wales possessed 41,000,000, Queensland and Victoria coming next with about 10,000,000 apiece. Owing to the severe drought in that year and in 1902, the numbers were greatly reduced, and the census of 1903 shows a total for the Australian States of only 55,000,000, of which number more than half is accounted for by New South Wales. In the other States, with perhaps the exception of West Australia, the area suitable for sheep breeding is so small that no great expansion can be looked for, but it may be mentioned that, under the present system,

the States are capable of maintaining, in ordinary seasons, nearly 400,000,000 sheep, or their equivalent in cattle. And this capacity could be much more increased by water conservation and cultivating artificial grasses. It is of course unlikely that the full capacity will ever be reached. Agriculture, by its absorption of the best land, must restrict the area available for the grazier, and the extension of the former industry will most probably be of greater rapidity than the latter. The production of wool is of course the source of the greatest value in sheep breeding, and it is satisfactory to note that with the greater consumption of wool by the world's markets the yield per sheep is increasing. Australian wool, or as it is otherwise termed, merino — for the crossbreds form an inconsiderable proportion of the flocks — is in great request by European manufacturers. The climatic and other conditions of the continent on the great plains of the interior have been peculiarly adapted to the growth of the merino, and as a natural consequence over 90 per cent of the flocks of Australia are of this variety. In 1901 nearly five hundred and ten million pounds of wool in grease were produced in the Commonwealth, the bulk of which was exported to Great Britain, the Continent of Europe, and America. In 1903 the export had fallen off to nearly half that amount, the total being 320,000,000 pounds of grease and washed wool, valued at £ 14,000,000. The total value of pastoral property in Australia including improvements, plant and stock has been estimated to exceed £ 240,000,000, and of this the value of stock alone is represented by an amount, approximating to £ 120,000,000.

Cattle breeding comes next to sheep breeding in importance, and in this section of pastoral pursuit Queensland takes the lead, New South Wales pastoralists finding sheep breeding more profitable. West Australia possessing in its North Western districts some excellent cattle country, is coming forward in this direction, although slowly. At the end of 1901, the number of cattle in the Commonwealth was estimated at 8,465,649 and this number had been reduced from a total of over 11,000,000 in 1891 by the adverse seasons experienced in that decade. A further reduction is shown by the census of 1903, which gives the total as 7,104,695.

The breeding of horses in Australia has not been commensurate with the advantages offered by the natural resources, though excellent stamps of saddle and light harness horses have been turned out. India has for years absorbed a large number for army purposes — indeed the Australian cavalry horse is designated by the distinctive term "Waler" there — and the recent war in South Africa emphasised

anew the capabilities of Australia as a supply base for remounts. The products of the pastoral industry besides wool already referred to have a most important commercial value. Not so many years ago the question of the disposal of the surplus stock of Australia became a very serious consideration, and at one time it seemed as though the pastoral industry had reached its limit of productive usefulness. The discovery of methods of chilling and freezing meat however, removed this apprehension, and the frozen meat export trade is steadily assuming larger proportions. Works for the preparation of carcasses for export in this manner have sprung up in many of the coastal towns, and a regular fleet of refrigerating steamers is employed in the carriage of the commodity. With the frozen meat trade must be considered the meat preserving industry, the two together affording employment for a large number of hands, and enabling the producer to reap a substantial benefit, side by side with the European consumer. The export of meat has reached the highest dimensions in Queensland, though in mutton alone New South Wales takes the lead. In addition to wool and meat, the pastoral industry is, of course, responsible for the production and export of large and increasing quantities of hides and skins, tallow, hair, horns, bones, etc., and it may be said that little of either sheep or cattle killed in the State is allowed to run to waste. It is thus abundantly evident that the pastoral industry constitutes the greatest element in the wealth of Australia and has fully justified the hopes of the past and the keen endeavour of the present.

MANUFACTURES.

Before the establishment of the Commonwealth and the imposition of a Federal tariff the manufacturing industry of Australia did not show many signs of marked progress and prosperity. The barriers of Intercolonial duties prevented in many instances expansion beyond the boundaries of the State, and manufacturers had generally to limit their output to the requirements of the State in which they were situated. With a protective tariff applicable in equal measure to all the States, which will put a check on foreign importations, and Interstate freetrade, which permits unrestricted movement between the present political divisions, it may however be anticipated that secondary production will receive a decided impetus. In the main, the factories of Australia are devoted to the manufacture of such articles as are perishable in their

nature, and designed for domestic consumption, but there are in addition a fair number of firmly established industries of a more complex character. The factories give employment to a large number of hands, totalling nearly 200,000 for the Commonwealth, the greatest number being engaged in industries connected with the manufacture of clothing and textile fabrics (including boots and shoes). The first State to give really serious attention to manufactories was Victoria, but New South Wales within the last few years has been gradually overhauling her Southern sister and at the present day, in some aspects at least, shows a better return. The value of production from manufactures was for instance larger in New South Wales than in Victoria for 1901, both in its total and its per capita distribution. The total value of the output from the manufactories of Australia amounts approximately to 65 million sterling, of which some 28 million represents the value added to the commodities in the course of treatment. There is undoubtedly a very great future before the manufacturing industry in Australia, and there seems no reason why in the near future an export basis should not be remuneratively established. There is a wide field open to her in the shape of Eastern and South Sea markets, and though in the former case she will have a competitor in Japan, there is certainly enough and to spare for the two countries. The handicap Australia is most concerned in at present is the high rate of wages which the labouring classes have established for themselves. This rate is, as has already been pointed out, much above that paid in European countries, and adds a very substantial figure on the cost of production. But as an offset against this there is the fact that the raw material for many manufactories is produced within her own borders, and thus the cost of transit will be materially reduced under that paid by European manufacturers who have to depend largely, if not entirely, on outside supplies in many lines. But Australia has yet to become a self supporting community in several branches of the industry, and until that position is attained — and there seems every reason for anticipating its early realisation — it is of course rather premature to discuss the exportation of the finished article to countries beyond her shores.

LITERATURE AND ART.

While it would be perhaps too much to say that Australia has already developed a literature of her own, "racy of the soil" and breathing the influence of the land in its

outlook and its sentiment, there are at any rate many indubitable signs that her writers have at last broken loose from the shackles of conventionality that in previous generations bound them to the methods and manners of the English types. But so far it is the beginning only that has been made. "Australian books by Australian writers" there are in plenty, but only a few have caught the spirit of the land or shown the influence of Australian surroundings in such a way that their work stands out prominently and is accepted by Australians as typifying themselves. The tendency of writers in Australia is in the main towards the short story or "conte", or else to verse. The sustained effort necessary for the production of a novel or a book of general literature is not very evident — certainly among those who are recognised as leaders. In verse too the same tendency is manifest, and the lyric is vastly more popular than the epic. The art movement has since its inception, kept pace with the development of the country and has made considerable progress all over the continent. Although one cannot as yet speak of an Australian school of painting, some good work has been done by Australian artists, examples of which may be seen at the galleries and at the annual exhibitions of the different States. By an arrangement made some ten years ago (1894) the Art Galleries of Sydney, Melbourne, Adelaide and Perth have adopted a system of interchanging their finest works to the great advantage of the art loving public and students. Australians are generally speaking a music loving people and though the ideal of the general public is not a very high one in this respect, the fact that most of them patronise the art in some form or other at all events promises a future development if not a present condition. Strenuous efforts are continually being made to extend and improve the educational status of music in the Commonwealth and chairs of music have been established at the Universities of Adelaide and Melbourne, where numerous colleges and examining bodies add to the good work with very gratifying results.

SPORT AND AMUSEMENT.

The Australians have already earned a world wide reputation for their whole-souled love of amusement in its manifold shapes and forms, and probably no civilised community can boast of so large a section devoted to some form of sport or pastime; while theatrical, musical and other ventures are, provided they are good, sure of a warm re-

ENGLAND V AUSTRALIA MATCH
ON THE MELBOURNE CRICKET CLUB'S GROUND.

ception both in the chief cities of the sea coast and in the interior. The press sets aside some columns daily to the chronicling of events in the world of sport, and there is in addition a considerable literature occupied entirely with this subject.

This love of sport is undoubtedly a heritage of their British fathers, but Australians, luckier in a climate more suitable for outdoor pastimes, have extended and developed their hereditary predilection. By some this striking phase of Australian character has been roundly condemned, and there is certainly a danger of the bounds of moderation being surpassed, but on the other hand the proclivity has resulted in the men — and women too for that matter — of the continent being strong and athletic, more healthy, and less subject to disease. All the sports of Great Britain have been transplanted and tenderly fostered in her daughter's lands. First and foremost of course there is horse racing, and the big race meetings of Melbourne, Sydney, Adelaide, Brisbane and Perth, attract thousands, some enthusiasts travelling hundreds of miles for the pleasure and excitement of a few days racing. Every holiday is taken advantage of for a meeting, and wherever a country town exists with the requisites of a decent field in reasonable distance, there will a race meeting be held. In cricket, Australians have proved themselves the equal, if not the superior, of the English elevens, and in football their strength has been sufficiently demonstrated, though the warmer climate acts as a substantial deterrent to the universal adoption of the game. Tennis and cycling have likewise many adherents, while the achievements of the Australians in rowing have long been prominently before the public. Sailing has also been a favourite pastime in coastal towns for very many years, and the excellence of the harbours and rivers afford opportunities for its indulgence which are very largely availed of. Field sports are also very largely patronised and a day with the rod or gun can usually be enjoyed within easy distance of the centres of civilisation. The absence of the so called big game throughout Australia minimises the element of danger so dear to the heart of the field sportsman, but his compensation lies in the excitement of wild fowl shooting, which broadly speaking, can be secured anywhere, especially on the shallow swamps of the coast or the lagoons of the interior. The fish of the sea coast and of the interior rivers are largely sought for by devotees of the rod and line, and in addition to the indigenous varieties, attempts — successful on the whole — have of recent years been made to acclimatise European

varieties. In short, there is probably no branch of sport that is not extensively followed out in Australia, its votaries comprising all classes from the highest to the lowest. The sight of Flemington on a Melbourne Cup day or of the Sydney Cricket Ground during the progress of a test match between England and Australia, with its tens of thousands of keen spectators alive to every point and ranging in position from the idle rich, to the artisan who gladly pays his admission for the privilege of sitting out in the hot sun all day long watching the sport, is a sight that cannot fail to draw the attention of a visitor, and impress him with the fact that Australia is permeated with a common bond of interest, such as is absent, to a greater or less extent in older countries.

All the principal towns of Australia extend gratifying support to music and the drama, and in the capitals theatres are continually being occupied by most meritorious companies. The comparatively small population of these cities necessitates continual change, and there is no record of phenomenal "runs", for any piece. Instead a constant succession of combinations varying from high class drama or grand opera downwards, moves between the different cities, and the impresarios of the Continent are always introducing new stars or new features to a people who are ever ready to applaud the good. On the concert platform, celebrities of European reputation are nearly always to be heard at one time or the other, and most of the first flight vocalists and instrumentalists of the world find a trip to Australia a profitable experiment sooner or later. In addition, the local talent is considerable, and many of the aspirants for grand opera honours in Europe at the present time are Australian born. The pure warm atmosphere of the Australian States is said to be particularly suitable for the vocal chords and a consideration of the long list of Australian singers who have won their laurels in competition with the rest of the world bears out this assertion. Confident assurance may be given to the visitor that during his stay in Australia no matter where he resides he will never lack the opportunity for gratifying his taste for pleasure, whether that taste leads him to out-of-door pursuits or the footlights of the theatre, or the attractions of a concert hall.

HOTELS.

Lying somewhat out of the conventional tourist route round the world, Australia does not cater to any extraordinary extent for the tourist class. The principal towns of the

sea coast have always a large floating population, but the bulk of this is drawn from the interior, and the oversea portion of it is not large, while at the same time business rather than pleasure is the object of their sojourn. With few exceptions the hotels of Australia are distinctly inferior to those of Europe in some respects, although the charges are perhaps more moderate. From 10/— to £ 1 per day is the usual tariff (at first class hotels) but for 12/6 per day excellent accommodation can be secured. At many of the hotels the American system, where a fixed charge is made for bed and meals, and the European system in which payment is made for the room and meals separately, are both in vogue. The charges include bath, heating, attendance light, etc., and in some instances boots and shoes are cleaned without extras. For a prolonged stay in any of the large cities, boarding houses, which abound everywhere, will often be found more convenient and economical than hotels, and a visitor will have no difficulty in finding suitable accommodation in this respect. The tariff in boarding houses varies from £ 1.0.0 to £ 3.3.0 per week; £ 2.2.0 being a fair price at a first class boarding house in the best locality. The weekly payments should include baths, bootblackening, lighting, but not firing, etc. For a longer stay furnished houses or furnished apartments are as a rule easily procurable, either in city or suburbs, at reasonable prices. Besides hotels where a table d' hôte system prevails, there are everywhere a very large number of restaurants and tea rooms serving excellent meals a la carte at a moderate charge. Coffee, tea, and in some cases wine is included in all the meals at a fixed price. The character of the menu at the various establishments enumerated above varies of course with the price, but generally speaking the dishes are English in the manner in which they are made up and the ingredients of which they are composed. It is possible however in all the capitals to obtain Continental meals of divergent degrees of excellence and faithfulness to the professed model. For liquors, a choice is given at the first class hotels of all the best brands of European wines, beers and spirits. Australian wine also is generally good and cheap, but the European wines offered in other than the foremost houses are frequently inferior to the native vintages. The prices charged for the European wines are generally high.

RAILWAYS.

The first railway in Australia extending from Flinders Street, Melbourne, to Port Melbourne, a distance of 2½ miles,

was opened to traffic in September 1854, followed a year later by the opening of a line from Sydney to Parramatta, a distance of 14 miles. Since then the construction of railways has made rapid progress in all the colonies, and in 1904 the Commonwealth of Australia had 13,474¹/₄ miles of State-owned lines open to traffic, of which 3,381 miles fall Victoria, 3,280³/₄ to New South Wales, 2,928 to Queensland, 1,881³/₄ to South Australia, 1,541 to Western Australia and (in 1903) 461³/₄ to Tasmania. During the year ended June 30th 1904 the number of passengers carried amounted to 113,010,530 exclusively of season ticket holders, while a goods tonnage of 15,890,483 was carried in the same year. The railways are chiefly in Government hands, only 950¹/₂ miles being private lines. The total cost of construction and equipment up to 1904 was £131,930,764, and although many of the branch lines traversing thinly populated parts of the country are being worked at a loss, the interest returned on the capital invested amounts to 3.08 per cent for the Commonwealth. The lines in Western Australia were the most cheaply constructed at a cost of £5,812 per mile, as compared with £12,890 per mile for New South Wales, or an average cost of £9,791 for the Commonwealth and £9,658 for the whole of Australasia. The greater engineering difficulties which had to be surmounted are perhaps responsible for the increased cost of the New South Wales lines, which comprise some of the steepest gradients in the world. Altitudes from 1,000 to 2,000 feet are frequently met with and the highest point of any of the railway lines of Australasia is attained here at Ben Lomond on the Northern line where an altitude of 4,571 feet is reached. It is unfortunate for the interests of the Commonwealth that the gauge of line differs in the principal, and one of the problems of Federated Australia will be the adoption of a uniform gauge on the continent to facilitate interstate communication, and the one laid down in New South Wales (4 feet 8¹/₂ inches, known as the standard gauge), is likely to be adopted.

The equipment of railways varies in the different States but the carriages are as a rule comfortable, Pullman cars being in use on some of the main lines. There are but two classes, first and second, sleeping berths being procurable only in first class. A special ticket is required for a sleeping carriage, and it is advisable when booking to secure a lower berth where the vibration is less felt. No dining cars are attached to the trains, but meals are served at a moderate fixed price (2/— to 2/6) at the railway refreshment rooms of certain stations where the train halts from 20 to 28 minutes at suitable hours.

Fares. The scale of fares differs in each State but 2 d. per mile for first class and 1 $\frac{1}{2}$ d. for second class may be accepted as being a fairly correct average. Return tickets have a reduction of about 25 per cent while special holiday excursions are often remarkable for their cheapness. The following will serve as a specimen of the rate of fares: — From Melbourne to Sydney a distance of 576 $\frac{1}{2}$ miles the ordinary single fare for first class amounts to £4, that for second class £3. The reduced single fare for ocean steamship passengers is £2.14.0 and £2.0.0 respectively. There is a further addition of 12.6 for a sleeping berth.

The return half of first class ordinary tickets issued between Sydney, Melbourne, Adelaide, and Brisbane, and also Melbourne and Adelaide to Brisbane, are interchangeable for such steamship companies tickets as the Railway Commissioners may agree to accept; and in the same manner the return portion of steamers tickets is interchangeable for railway tickets, on being so endorsed by the Steamship Company and then presented at the booking offices at the towns mentioned.

WESTERN AUSTRALIA.

The State of Western Australia owes its first settlement to the fear, never quite dormant in the minds of early colonists of Australia, that the French intended to annex part of the continent. In order to thwart these designs, if such indeed were existent, King George's Sound was settled by a party of soldiers and convicts in 1825. Next year Captain Stirling surveyed the Swan River upon the banks of which Perth now stands, and his reports were so eulogistic that its colonisation was determined upon by the British Government. Most liberal terms as regards grants of land were conceded and enthusiastically accepted in England, and in 1829 Captain Stirling, who was sent out as first Governor, landed on the site of the future capital with the first batch of immigrants. The equipment of these first colonists was complete to a degree which might almost be called extreme, but unfortunately they lacked the essential qualities of pioneers. They were all anxious to acquire land, and for the most part they easily achieved that desire, but having become possessed of it they found an almost total absence of suitable labour to work it, and, as all the land within accessible distance of the chief settlement was speedily locked up in huge estates, many of the yeomen class, who came out expecting to find work for their hands in the new land, passed on in disgust to the eastern colonies. As a natural consequence the new settlement languished, and though some attempt was made both at agricultural and pastoral pursuits, it was with the greatest difficulty that the settlers could maintain themselves without outside assistance. This disadvantage coupled with the fact that serious trouble with the natives arose, was most disheartening, and on one occasion it was very nearly decided to abandon the settlement altogether. Things afterwards became more hopeful, and an era of steady progress set in. Settlement was extended inland and along the coast to the south of Perth, but the isolation of the colony, the fact that a considerable portion of the known area was found unfit for cultivation, the unfitness of many of the first settlers for manual labour, and the absorption of the best lands in the hands of a few holders, militated against Western Australia advancing as did the other Australian provinces. To obviate to some extent the dearth of the labouring classes, convicts were

introduced in 1850, and transportation to "the Swan River Settlement" continued for about eighteen years. Bond labour was instrumental in opening up the natural resources of the Colony somewhat, but in other respects, the presence of convicts, as might have been expected, was not altogether satisfactory. Under Governor Weld (1869-1874) the condition of stagnation was altered very much for the better, and with communication along the coast by steamers and on the land by railways, Western Australia began to awaken, while pastoral occupation following in the wake of successful explorations commenced to widen out the known area.

But in the eighties the first hint came that Western Australia was to become famous for its minerals beyond all other sources of natural wealth. The "North West" had for some years attracted attention on account of its grazing capabilities, and several expeditions had been despatched to gain further knowledge. In 1884 Mr. Hardman who accompanied one of these, announced that he had found indications of gold sufficient to justify the conclusion that it existed extensively in payable quantities, and estimated that two thousand square miles of the country through which he had passed were auriferous. Prospecting was vigorously entered upon, and at the end of 1885 the first "rush" to Mount Barrett took place. The field was 250 miles inland from Wyndham on the coast, and almost inaccessible. But men poured into the new port by hundreds; the old gold miners, willing to endure the hardships they knew they must undergo, being completely outnumbered by the inexperienced and incompetent who swarmed along the tracks, many of them utterly unprepared and wholly incapable of putting up with privations. Mount Barrett in its alluvial workings did not come up to expectations, and the incompetent beat a retreat, leaving the experienced men to prove the richness of the quartz. Specimens sent to Melbourne went to show that in the two Kimberleys, as the district was called, were some of the richest reefing fields the world has ever seen. Henceforward indications of gold began to be found all over the colony, but for a long time Mount Barrett, Halls Creek, and the two Kimberleys were supposed to be the only payable fields. In 1887 however, Yilgarn, with Southern Cross as its centre, was discovered in the locality almost due east from Perth, and the find was confirmed by the subsequent discovery of Golden Valley in the same district. The discovery of these fields spurred prospectors to greater activity, and in 1889 the Pilbarra Field in the Northern district was made known, and by the end of the year it had exported over 11,000 oz. of gold. From now onward, new

fields came to light in all directions, men and money poured in from all quarters of the globe, and the experiences of Victoria in the fifties were repeated. The Eastern States despatched large numbers of adventurous spirits to the "Golden West", and as the population increased the community was at length shaken from the apathetic state of its early years, and Western Australia forged ahead rapidly, attracting speculators from Great Britain, foodstuffs from the rest of Australia, and trade generally from all parts of the world. In 1892 the Coolgardie field was discovered by Messrs. Bayley and Ford in a most sensational manner, and a wholesale exodus took place to the new locality, which later was to prove one of the richest fields in the State. That rush was surpassed when Kalgoorlie, some 20 or 30 miles to the north was discovered in its turn. It would be impossible within reasonable limits to attempt a history of the gold discoveries of Western Australia. It must suffice to say that in the short space of a decade the colony established her place at the head of the Australian States as a gold producer, a position she has ever since maintained. The extent of the State's auriferous belt is even now a matter of conjecture, and new discoveries are yet being made periodically in different directions. The recent development in the Macdonnell Ranges of South Australia is supposed by some to point to the fact that the whole country between that and Kalgoorlie is gold bearing, but as much of it is barren and almost inaccessible it will be sometimes before the theory is fully tested.

The discovery of gold lifted Western Australia to a much higher level in the place of Australian politics than she had held up to that date. Until 1890 the province had been a Crown Colony, but in that year responsible Government was granted the community, and under the control of an energetic ministry, affairs were improving gradually until the "golden days" broke in upon the steady developmental work and forced such colonists as were still conservatives to join the rest in the enthusiastic advancement of their State. A vigorous public works policy was initiated, railways were pushed out in all directions, public buildings more suited to the changed conditions were erected, and in every branch of public and private life the State showed signs of having forever cast the lean years behind.

AREA AND PHYSICAL FEATURES.

The greater part of Western Australia, which has a total area of 975,920 square miles, consists of tablelands of varying altitude but never very lofty, bounded to seaward by low



rar
the
the
by
we
St
nc
m
D
ta
in
of
th
p
W
w
c
M
h
L
n
v
h
t

ranges of mountains, running for the most part parallel to the coast at some little distance from it. On the south coast the high land terminates abruptly in a series of cliffs washed by the waters of the Great Australian Bight. In the south western corner there is considerable broken ground, and the Stirling Range, rising abruptly from the plain land to the north west of Albany, marks the beginning of the main mountain system. Between it and the western littoral is the Darling Range running almost due north and south, a distance of about 300 miles. It has no peaks exceeding 1,500 feet in height, and its steep seaward face looks down on a belt of country from 20 to 30 miles broad, containing some of the best agricultural land in the State. The Roe Range, parallel to it but further east, runs up to 3,000 feet in Mount William, but this height is not continuous. In the north-west and northern divisions the ranges do not approach so closely to the seaboard, but they attain a greater altitude, Mount Augustus in the Gascoyne district being 3,500 feet in height, and Mount Bruce further north measuring 3,800 feet. In the extreme north-east there is a very well defined mountain system, with several ranges such as the Mc Clintock, Albert Edward, Howitt, Cockburn and other ranges, which with the King Leopold Range, bound the Kimberley tableland with its rich pastoral lands, rivalling in quality the best that North Queensland can offer. Inland the country is generally poor, and though explorations have yet to be made to discover its character over all its extent, large parts may be definitely set down as almost worthless from the commercial aspect. Indeed the great desert of Central Australia pushes its boundaries far into Western Australian territory. The belt along the western coast is well watered, covered with forests, and where cleared proves excellent arable land, and even the inland districts, poor though they appear to the general observer, have been found to yield heavy crops when irrigated. The streams of Western Australia, though numerous, are not important and many be generally described as channels to carry off flood waters in the rainy season. The principal rivers are the Ord and Fitzroy, De Grey, Fortescue and Ashburton flowing into the Indian Ocean on the north coast, the Lyons, Gascoyne, Murchison, Greenough, Swan and Murray on the west, and the Blackwood, Warren and Pallinup flowing south, while numerous smaller streams reach the coast along its entire length. Very few Western Australian rivers are navigable. The lakes of the interior, though on the map they appear extensive, are really, except after heavy rains, mostly dry beds, and even the best of them degenerate into swamps during the dry season. Though

the coast line of Western Australia measures over 3,500 miles and is considerably indented, the State possesses few good harbours, most of the indentations being either shallow, exposed or possessing bars. The principal arms of the sea are Cambridge Gulf, King Sound, Sharks Bay and King George's Sound, Albany being situated on the shores of the last named. To the northward, a line of coral reefs adjacent to the coast acts as does the Great Barrier Reef of Eastern Australia, and inside the line good anchorage is to be found. Along the entire coast are islands, but the only ones of importance are Dirk Hartog Island and Rottnest Island, while the groups of Houtman's Abrolhos and the Lacapedes may also be mentioned.

CLIMATE AND RAINFALL.

There are three well defined climatic belts in Western Australia — the tropical, sub-tropical and temperate. In the north and north-west the climate is truly tropical possessing the usual attributes, a wet and a dry season clearly marked, excessive heat in summer and in the inland parts a comparatively cold winter. The wet season, lasting from November to March, renders the summer very disagreeable, the humidity of the atmosphere making it very unpleasant for Europeans. The winter however, is cool and bracing. Temperatures range from 110° in summer with a mean of 85° to 90°, to 33° in winter, with a mean of 68° to 72°. The sub-tropical climate experienced in the Eastern division is not particularly invigorating, being subject on the one hand to intense summer heat, and on the other to insufficient rainfall. In the Western and South-Western divisions the climate is really delightful, surpassing in many respects that experienced on the eastern side of the continent. There are practically only two seasons — summer and winter — and though the temperature in the former frequently exceeds 90°, a cool sea breeze, which penetrates some distance inland, renders conditions bearable for the best part of the day. Under any circumstances the atmosphere is usually dry, and the heat consequently not distressing. Along the southern coast the weather is even more salubrious and "hot days" are comparatively unknown, while the winter has all the attraction of one in Southern Europe. At Perth the average annual temperature for a series of years is 64°, with a mean maximum of 86°, and a mean minimum of 64° for the year 1902. The highest temperature recorded since 1897 was 107° and the lowest 37° Fahrenheit.

The rainfall of course varies with the climate. With the exception of the eastern districts, drought is practically unknown in Western Australia and the wet season very seldom fails, the storms sweeping inland from the Indian Ocean almost invariably bringing a downfall in their train. In the north the rainfall is sometimes very heavy, and the coast is occasionally visited by tornadoes of great fierceness. The mean annual rainfall varies from about 28 inches at Wyndham to 11 inches at Cossack. The average rainfall in the six land divisions to the end of 1901 were as follows: Kimberley 24·42, North-West 12·95, Gascoyne 7·69, Eastern 8·25, South-Western 22·64, Eucla 13·56.

POPULATION AND VITAL STATISTICS.

Although the opening up of the gold fields in the nineties brought a large influx of population to Western Australia, the State cannot be said to have begun to be effectively occupied by a permanent and productive population, and even the most closely settled could support a far greater number than they are called upon to do. At present however immigration of a desirable character is steadily proceeding both from European countries and the other Australian States, and the last few years saw a greater numerical increase in the excess of arrivals over departures than appears in any other time since the "gold boom" period. Exclusive of full blooded aborigines the population on the 30th June 1904 was estimated at 238,010, of which nearly two thirds were males. This disparity between males and females evidences one of the faults of Western Australian occupation, demonstrating as it does that a fair proportion of the population is of the floating or unsettled character, moving from goldfield to goldfield and ready to leave the State on any better opportunity offering elsewhere. Furthermore the census returns showed that a fairly large element of the male population consisted of married men whose wives and families were living elsewhere. It is satisfactory to note that the aggregation of population in the principal cities is not so marked in Western Australia as on the eastern side, Perth having only 20·44 per cent of the State's population, as against 41·47 for Melbourne, and 45·57 per cent for Adelaide. According to the census of March 31st, 1901, the birthplaces of the then population (184,124) were as follows: —

Western Australia	52,663
Other Australian States	74,289
New Zealand	2,704
United Kingdom	41,551
Other British Possessions	1,980
German Empire ..	1,527
Chinese	1,475
Italy	1,354
Sweden and Norway	1,174
United States of America	1,035
Other Foreign Countries	3,813
Born at Sea and Unspecified	559
Total...	<u>184,124</u>

Western Australia has the highest birth rate among the Australian States, the figures being 30·27 per thousand of the population in 1903. The decline noticeable throughout the Commonwealth is not so marked in the case of Western Australia and the rate, moreover, has been subject to some fluctuation, the rate for quinquennial periods dropping from 35·07 in 1861—5 to 31·30 in 1870—5, rising to 36·88 in 1886—90 and falling again to 28·73 for 1896—1900. The insanitary conditions which are inevitable in such localities as goldfields newly opened, are responsible for a high death rate (13·72 per thousand in 1902) in the State, but conditions are gradually improving, and these figures had decreased to 12·60 per thousand during 1903. As the birth rate fluctuated, so of course did the death rate, the highest figures (17·19 per thousand) being reached in 1881—5, 14·32 in 1876—80. Apart from the gold fields area — and indeed including that part of the latter that has been longest worked — Western Australia may be said to be a healthy country. The following summary gives the causes of death in 1900: —

Specific febrile or zymotic diseases	363
Parasitic Diseases	11
Dietetic Diseases	47
Constitutional	246
Developmental	176
Local	996
Violence	264
Ill Defined	137
Total...	<u>2,240</u>

"In local" diseases there were 345 deaths from diseases of the digestive system, and these, with 363 for febrile and other kindred diseases, sufficiently explain the statement

CLEARING THE GROUND, WESTERN AUSTRALIA.

r
h
f
t
l
(
r
(
(

regarding the vital statistics of gold fields. Western Australia had for the period 1896—1900, no less than 1,397 deaths from typhoid, giving a much larger proportion on a population basis than that accruing to any other State, the rate being 17·69, as against 3·03 for Tasmania which ranks next highest on the list. But against this and in the State's favour it may be urged that in phthisis during the same period her death rate was the lowest in Australia, bearing strong evidence of the salubrity of her climate.

CONSTITUTION.

Prior to 1890 Western Australia was a Crown Colony, but in that year responsible Government was conferred upon her by the Imperial Parliament after much deliberation. It was at first argued that to permit the small population then inhabiting the State to assume control of so vast an area was a piece of political folly, but by the exertions of the State's delegates and of the Agents General of the other Australian provinces these objections were removed, and a constitution similar to that prevailing all over the Australian States was bestowed. The Governor, appointed by the Crown and assisted by a cabinet, controls the executive, and the legislature is bicameral, Parliament consisting of a Legislative Council and Legislative Assembly. Both Houses are elective, the Council, consisting of thirty members, being returned by ten electorates, voting on a property qualification. Members must be over 30 years of age, resident in the State for two years, and a natural born or naturalised subject of His Majesty. At the expiration of two years from the date of election and for every two years thereafter, the senior member of each district retires. For the Lower House there are fifty members returned from the same number of constituencies, the voting qualification being practically a residential one, though a property qualification is also made. The Legislative Assembly is elected for three years from the date of the first meeting.

EDUCATION.

Primary Education in Western Australia is free, and compulsory for all children between the ages of 6 and 14, who must attend on every day that it is open, the school within a radius of 2 to 3 miles. No religious instruction is imparted in school hours, but the Bible is read without

comment to such children as care to attend half an hour before school opens. The State School system is under the control of a department with a Ministerial head, who has extended powers of enforcing the attendance clauses. The Government Schools are of six classes: — State, Provisional, Half Time, "House to House", (in the sparsely populated districts) Special, and Evening. At the end of 1903 there were 270 State schools open in Western Australia employing 675 teachers, and having an average annual attendance of 24,532 children. The expenditure on administration and maintenance was £108,658, and on school premises £36,805, with a revenue from fees, rents etc., of £1,919. The Government also encourage secondary education which is in the hands of private institutions. There were 92 such institutions, denominational and otherwise, in the State at the end of 1903 with 346 teachers and an average attendance of 5,618. The principal private school is the High School for Boys at Perth, which is subsidised by the Government, which also grants scholarships and bursaries thereto to pupils of State schools. The private schools are under a system of State inspection and examination. There is no University in Western Australia. A Technical school was opened in Perth in 1900 and has proved an advantage to those desirous of obtaining instruction in that branch of education, while classes in certain technical subjects have also been added to the curriculum of State schools.

RELIGION.

The system of State aid to religion was abolished in Western Australia only in 1895, when, in lieu of the annual grants made to Anglicans, Roman Catholics, Wesleyans and Presbyterians two sums of £17,125 each was distributed among these denominations. According to the last census returns (1901) the percentages of the population acknowledging the several denominations were as follow in the order of importance:— Church of England 42·0, Roman Catholic 23·4, Wesleyan and other Methodists 13·6, Presbyterians 8·2, Congregationalists 2·5, Baptists 1·7, Jews 0·7, all others 7·9. The whole of the Church of England in Western Australia is under the jurisdiction of the Diocese of Perth, the Bishopric having been established in 1856. There is a Synod, inaugurated in 1876, at the head of which is the Bishop as president, every licensed clergyman and two lay communicants for each clergyman constituting it. In all there are 52 parishes, parochial

districts, etc., with 56 clergy, 257 buildings used for divine worship, and 5,627 communicants enrolled. A native mission for aboriginal children is connected with the Church of England. There are two Roman Catholic dioceses in the State — at Perth and at Geraldton, the former founded in 1845 and the latter in 1898. In addition there is the Vicariate Apostolic of Kimberley and the Abbey-Nullius of New Norcia. The last named was originally founded in 1846 by two Spanish Benedictine monks for the Christian civilisation of the Australian aborigines. New Norcia is about 80 miles to the northward of Perth and the territory of the Abbey-Nullius is about 16 square miles in extent. Two missions, Marah and Wyening, are attached to New Norcia. Some 150 aborigines are lodged, fed, clothed and educated at the Abbey, and the station buildings are quite like a little town, with a church, post office, court house and about 50 other buildings in brick and stone. In the two dioceses are 51 religious and secular priests, 64 buildings used as churches and convents at Perth, Fremantle, York, Bunbury, Newcastle, Coolgardie, Kalgoorlie and Subiaco. For the Methodist church of Western Australia there are 65 churches and 93 other preaching places, 47 ministers and home missionaries and 2,176 members of the church. There are 16 Presbyterian ministers, attending to 18 places of worship, having an average attendance of 2,930. Baptist churches number 13 with 12 ministers and home missionaries and 1,366 adherents. The Congregational Union has 15 churches and 2,300 adherents.

FINANCES.

For the year ending on the 30th June 1904 the revenue of Western Australia was £ 3,550,016, and the expenditure £ 3,698,312, leaving a deficit of £ 148,296. The principal sources of revenue may be classified as follows:— Taxations, £ 235,114; Railways and Tramways, £ 1,612,608; Public Lands, £ 205,854; Surplus Commonwealth revenue returned to the State, £ 1,065,244; Other Sources, £ 431,196. The expenditure for the period under review, broadly subdivided, is as follows:— Railways and Tramways, £ 1,228,235; Public Instruction, £ 134,337; Interest and charges on Public Debt, £ 714,634; All other Services £ 1,621,106. The Public Debt of the State on June 30th 1904 amounted to £ 16,090,288 or £ 67,12,1 per head of population.

Since the year 1894 there have been six banks of issue operating in Western Australia, only one of which — the

Western Australian Bank — having its head office there. The other five are:— The National Bank of Australasia, The Union Bank of Australia, The Bank of New South Wales, The Commercial Bank of Australia and The Bank of Australasia. Banking business is on a sound footing in the State, and the expansion which has taken place is a proof of its prosperous condition. Substantial increases have taken place in the deposits during the last few years, the total in June 1904 being £ 4,726,158, of which the sum of £ 3,296,231 did not bear interest. The notes in circulation on the same date totalled £ 354,715, and the total liabilities were £ 5,186,192. The total assets in June 1904 were £ 6,375,836, consisting of Coin and Bullion, £ 2,143,049; Landed Property, £ 197,697; Other advances etc., £ 4,035,090. In considering the accumulation, the transactions of the Government Savings Bank must be taken into account, which, in the same year, held a sum of £ 2,058,619 due to 56,628 depositors, giving an average of £ 36.7.1 to each depositor, thus clearly demonstrating a prosperous state of affairs. The excess of deposits over withdrawals for the year amounted to £ 117,388. No life assurance company has its head office in Western Australia, and it is a difficult matter to arrive at the figures as most of the companies do not publish returns for each of the separate States. It may be said however, that the average sum assured (£ 304) is greater than the figures for any other State of the Commonwealth.

COMMERCE AND SHIPPING.

As Western Australia is very far from being self supporting, her import list is a particularly heavy one, and per head of the population is much greater than that of any other State of the Commonwealth. The total value of all imports into the State for the year 1903 was £ 6,769,922, the principal items therein being:— Wearing Apparel, Drapery, Boots and Shoes, etc., Machinery, Tools, Iron, Steel, Ironmongery etc., Dairy Produce, Wheat, Flour, Oats, Potatoes etc., Live Stock, Spirits, Beer and Wine. The per capita value of the exports is also, as with the imports, higher than that of any other Australian State being, for 1903, more than double the amount per head of South Australia's figures, the State which is its nearest competitor. For the year 1902 the total value of all exports was £ 9,051,354, and for 1903 this had increased to £ 10,324,732, the chief items being:— Gold Specie, Raw Gold, Wool,

Timber, Hides and Skins, Pearls and Shell, Sandalwood, Copper and Tin. The trade of Western Australia is mostly carried on with the United Kingdom, a total eight millions in value out of an aggregate of fifteen millions passing between the two countries in 1901. Next in importance in this respect were the remaining States of the Commonwealth with three millions, and following them came other British possessions with two millions and foreign countries with one million. The principal port of the State is Fremantle, and over the wharves of that city there passes four fifths of the trade of Western Australia, the figures for 1901 being £12,169,806 out of a total trade of £14,969,794. The only other ports of note are Perth, which is almost purely an import port, Albany, which maintains both an export and import trade valued at half a million, and Bunbury. There are several other ports along the coast utilised chiefly as shipping and distributing centres for the country lying immediately behind them.

The number of vessels entered at West Australian ports for 1902 was 764 with an aggregate tonnage of 1,671,743, and 761 vessels of 1,680,469 tons cleared, giving a total inwards and outwards of 1,525 vessels and 3,352,212 tons. For 1903 the total tonnage of vessels entered and cleared was 3,335,895. The mail steamers which at one time called at Albany now visit Fremantle.

MINING.

Besides gold, the discovery and exploitation of which are elsewhere treated, Western Australia is rich in various other mineral resources. Extensive lodes of copper occur in the Mount Malcolm, Northampton, Murchison, West Pilbarra and Phillips River districts, but the first mentioned only, where the ore is treated locally, is being systematically worked. Until the year 1903, when the output was valued at £56,541, copper (ingot matter and ores) to the value of £391,603 had been produced in the State. When the cost of inland carriage is reduced by the extension of the railway system, copper mining will doubtless receive an impetus, and lodes, other than those mentioned, which are known to exist in eminently payable quantities, will be opened up. Tin also occurs in large quantities, but the ore is not very rich. The chief centres are at Greenbushes and the Pilbarra Field. At both of these places the supply of water for treating the ore is inadequate, and efficient developments

are therefore impossible. Magnetite and hewatite are found in great abundance, and ironstone is extensively used for flueing purposes, but otherwise the iron deposits are not worked, though their value would be very great were it possible to open them up systematically. Lead is found in the form of sulphides and carbonates of great richness, but the quantity of silver associated with it is small, and the production is in consequence limited. Coal of good quality is being raised at Collie River Works near Bunbury, to the South of Perth, and prominent geologists have asserted that the carboniferous area of the State is practically unlimited, extending a considerable distance under the Great Western Plains. Already 24,000 square miles of coal measures have been proven.

THE GOLDFIELDS.

Although it was not really until 1882 that the reports of Mr. Hardman on the Kimberley districts actually settled the question of the auriferous nature of Western Australia, indications of the existence of the precious metal had been found many years before. As far back as 1856 R. Austin claims to have found gold, and in 1860 R. Hargraves, the discoverer of gold in New South Wales, was retained by the Government to report on the subject. Payable gold, which however presented great difficulties in working, was found in 1868, but the gold history of the State may be said to date from the rush to the Mount Barrett field in 1884. The auriferous area has not yet been accurately measured, but it is at present known to contain nearly 350,000 square miles in 19 proclaimed gold fields. It extends from Kimberley to the south, between the 16th and 33rd parallels for a distance of 1,200 miles and its known breadth is 100 miles, while to the eastward is a large extent of country as yet untested, but which is almost certain to contain gold in payable quantities. The first auriferous belt, some 20 miles in width, extends from the Ashburton to the south coast. It consists of metamorphic and schistose rocks, and on this line are the Murchison, Gascoyne, Ashburton, Peak Hill, Yalgoo and Yilgarn fields. The second auriferous belt, divided from the first by a tract of granite country, runs from the north-west coast to the Dundas River, and its chief fields are the Pilbarra, East Murchison, Coolgardie, Mount Margaret and Dundas. The rocks here are more faulted and richer than in the first auriferous belt. The

outcrop occurs again in the Kimberley district, the auriferous schistose rocks outcropping at the head of the Ord and Fitzroy rivers where the Kimberley gold fields are situated. The width of this belt is at present undetermined, but gold has been found along its entire length. The production of gold from Western Australian mines has been very large, and though as yet the totals do not exceed those of Victoria, Queensland or New South Wales, it must be remembered that the State's career in this branch of mineral wealth does not really date back as far as twenty years, and that by that time the other States mentioned had placed a very considerable portion of their present totals to their credit. The figures for the last decade show indubitably that the Western province is beginning to overhaul her Eastern competitors, and with the exception of Victoria, the records of the latter are now in danger. Moreover, when developmental work has progressed further, the process of overtaking will be quicker, and it is not too much to say that within a few years Western Australia will stand only second to Victoria in the matter of total production, and that her annual output will show an excess above that of the other States far greater than is now the case. At the present date there are in all, as has been said, nineteen gold fields proclaimed within the State, but this number does not exhaust the total gold bearing area, where payable results are being obtained by prospecting parties. The following is a list of the goldfields, with their area, locality and the town in which the wardens office is situated:—

Northern Division:— Kimberley, 46,866 sq. miles, Halls Creek. Ashburton, 6,992 sq. miles, Mount Mortimer. Gascoyne, 5,061 sq. miles, Bangemall. Pilbarra, 34,880 sq. miles, Marble Bar. West Pilbarra, 9,480 sq. miles, Roeburne.

Central Division:— Peak Hill, 12,194 sq. miles, Peak Hill. East Murchison, 28,242 sq. miles, Lawlers. Murchison, 20,513 sq. miles, Cue. Yalgoo, 18,921 sq. miles, Yalgoo.

Eastern Division:— North Coolgardie, 30,609 sq. miles, Menzies. Mount Margaret, 42,154 sq. miles, Mt. Malcolm. Broad Arrow, 590 sq. miles, Broad Arrow. North East Coolgardie, 21,542 sq. miles, Kanowna. East Coolgardie, 632 sq. miles, Kalgoorlie. Coolgardie, 11,974 sq. miles, Coolgardie. Dundas, 17,848 sq. miles, Norseman. Yilgarn, 15,593 sq. miles, Southern Cross. Connybrook 102 sq. miles, Phillip's River.

With the exception of Kimberley and the two Pilbarras in the north and Donnybrook in the south, all these

proclaimed goldfields are contiguous, running from $22\frac{1}{2}$ degrees S. to the southern coast in latitude 34 degrees S. The glory of Kimberley has in part waned, and though good results are still being obtained in several localities, the field offers little inducement to capital, the difficulties of transit and the cost of working the mines materially detracting from the profits. The Pilbarra Fields, south and west from Kimberley, are situated in a most promising mineral area; but the same disabilities attach to them as to Kimberley in a greater or lesser degree. On the Ashburton and Gascoyne in the Northern division and Peak Hill in the Central, little developing work has been done recently, as the shallow alluvial deposits have to some extent been worked out, and the fields show a decline which is not likely to be stayed until it becomes profitable to erect reducing machinery in order to treat the deeper level ores. Of the Central district fields the Murchison and East Murchison are the most promising, and the latest returns show satisfactory increases. The centre of the Murchison fields, Cue, may be reached by rail either from the coast at Geraldton or from Perth itself via the Midland Railway, the line traversing also the Yalgoo field. Besides the railway, good and well watered coach roads connecting the different mining centres add to the advantages enjoyed by the Central Fields.

It is however to the Eastern Goldfields that the tourist in search of knowledge regarding the goldmines of the State will turn, not only on account of their accessibility but also because of their world-wide reputation for richness. It may be said that all of them, except Dundas and Phillip's River, are in direct communication by rail with the metropolis. The railway from Perth runs almost due east, through the hilly coastal country to the vast plains beyond. The goldfields area is fully entered upon by the time Southern Cross, 237 miles from Perth, is reached. This town is the centre of the Yilgarn goldfield and the chief mines in its vicinity are Golden Valley, Southern Cross itself, Mount Jackson, Parker's Range, Hope's Hill, Blakborne's and Fraser's. The railway extends thence to Coolgardie, and here it is that the visitor will gain his first insight into the enormous value of the West Australian goldfields. Known once as Bayley's Reward from the name of the man who found it, Coolgardie has established its claim to be considered a permanent goldfield, the alluvial working having been for years superseded by the more lasting operations on the deep levels. The lodes for the most part are wide and well defined and the gold

therein is evenly distributed. The principal mines in the vicinity are Bayley's Reward, the Londonderry, the Burbank Group, New Victoria Consols, Garfield and Australasian, all within easy distance of the town. Of these the most famous are Bayley's Reward and the Londonderry, but all of them register splendid yields, and the stone taken out is very heavily impregnated with the precious metal. About 24 miles E.N.E. of Coolgardie and 361 miles from Perth, with both of which towns it is connected by railway, is Kalgoorlie, the headquarters of the East Coolgardie Goldfield. Kalgoorlie has perhaps provided more sensation in mining circles than any other field in West Australia, and the immense richness of the finds made there, completely overshadowed its older rival, Coolgardie. At the present time it is unquestionably the premier goldfield not only of Western Australia but of the whole of the continent, and during 1902 the growth of the field has been phenomenal. Its annual output now exceeds a million ounces, while indications go to show that as the reefs are developed and more country is opened up, this total will not only be maintained but surpassed. Of the most famous mines on the field may be mentioned Lake View Consols, the Great Boulder (formerly Hannan's), the Golden Horseshoe, the Ivanhoe, the Great Boulder Perseverance, the Associated, the Associated Northern, Hannan's Brown Hill and Croya, the Kalgurli Block and the Great Boulder Main Reef. The first six of these are on a line known locally as the Golden Mile, and their output can only be called tremendous. Since their discovery these six mines have together contributed no less than 3,438,093 oz. to the gold yield of the State, the list being headed by the Lake View Consols with 761,255 oz., responsible for £1,312,500 in dividends. All these mines are most interesting subjects for inspection, and in each of them the latest machinery and appliances for effective extraction of gold have been installed. There are of course several other mines, all worth visiting, and Kalgoorlie in itself supplies the tourist with a sufficiency of knowledge concerning the ore mining and gold extracting conditions of the West Australian fields.

Kalgoorlie is a terminus for three branch railways to Menzies, Kanowna and Boulder City. The two first named are the centres of the North Coolgardie and North East Coolgardie fields respectively, while Boulder City is really an outpost of Kalgoorlie itself, being only four miles from that town. It is the headquarters of miners and others engaged on the Boulder Group of mines, and is rapidly becoming an important business centre. Menzies is about 466

miles from Perth and the Lady Shearton and Queensland Menzies and Menzies Consolidated mines are near at hand. To the west of Menzies is Mulline where some good "shows" were opened up. From the town a coach runs to Mount Malcolm, the official centre of the Mount Margaret Field, and a very typical mining township. The field is a most promising one and, in 1902 ranked among those from which came the most satisfactory increases in output for the year. Kanowna was the scene of a big alluvial rush in 1897, but the ground was soon exhausted and at the present time the deep level mines on the field call for no special mention.

Both Coolgardie and Kalgoorlie have long since passed the stage of "mining townships" and have blossomed into the dignity of cities. They are well laid out, lighted by electricity and adorned with many handsome buildings. Good hotel accommodation is everywhere procurable but, owing to the fact that all supplies have to be drawn from the coast, the tariff is comparatively high. Coolgardie, as the older town, is possibly more substantially built, considered as a whole, than Kalgoorlie, but the visitor, taking all things into account, will hardly find much to grumble at in the newer town. Clubs are in existence at both towns and the stranger is made welcome with the hospitality that is the hall mark of the miner — successful or otherwise. Up 'till recently, the great need of all the towns on the goldfields area was the want of water, which was obtainable only from wells, or for drinking purposes from the many condensing plants which for years drove a thriving business wherever a few miners were gathered together. This disadvantage has now been removed by the completion and successful opening of the Coolgardie Water Scheme, as it is officially designated. This scheme, the work of the late Mr. C. Y. O'Connor, involved one of the most difficult engineering feats attempted in Australia. Experts condemned the proposal in unmeasured terms, but it was persevered with and brought to a most successful conclusion. The water, conserved by the Helena Weir only 21 miles from Perth, is carried along 200 miles of water pipes to a high level reservoir near Coolgardie, and thence distributed by gravitation to Coolgardie, Kalgoorlie and other localities. The pipes, which are made of steel with a patent interlocking joint to prevent leakage, are laid along the surface of the ground, and the water is pumped through at the rate of some 5,000,000 gallons per day. The supply serves other stations along the route and was officially "turned on" in Coolgardie in the course of 1902.

AGRICULTURE.

Though Western Australia possesses a large area of land eminently suitable for cultivation, it cannot be said that so far she has made any practical use thereof. In the West and South-western districts soil and climate alike are favourable to the growth of cereals, which yield a high average crop, but Western Australia is still a large importer of foodstuffs. The official Year Book says of the State's capabilities: "Most of the European grains, fruits and vegetables can be cultivated and brought to a high state of perfection in the Southern part of the State. The soil in parts is sandy but this sand when irrigated is highly productive. There is a large extent of light friable soil suitable for all kinds of crops. The climate as regards agriculture is favourable, although at times subject to bad seasons." To the north there are extensive areas which may in the future be utilised for the growth of sugar cane and other tropical productions. There are also great facilities offering for vine growing in many parts, and wine making is yearly receiving more attention. Fruits of all kinds give luxuriant crops and many of the products of Southern Europe have been successfully transplanted to the State. But with these advantages Western Australia has still to trust to oversea importations of agricultural produce, and for the season 1902—3 the total area under all crops was only 283,752 acres. The principal subdivisions of this total were: Wheat, — 137,946 acres, yielding 1,876,252 bushels (as compared with 288,810 bushels in 1891, and 933,101 bushels in 1901); Oats, 14,568 acres, yielding 258,503 bushels; Barley, 3,609 acres, yielding 53,227 bushels; Hay, 109,002 acres yielding 121,934 tons; Vines 3,324 acres, from which about 200,000 gallons of wine were produced; Orchards, 7,938 acres.

Dairying is in the same backward condition as agriculture, and though of late years the importance of the industry has come to be more realised, much yet remains to be done, and the importations of dairy produce, such as bacon, eggs, butter, cheese, etc., are out of all proportion to the known capabilities of the South-western districts for dairy farming.

The Government have made an effort in the direction of stimulating agriculture in the State, and though a college has yet to be established, it has subsidised, more or less liberally, seventeen agricultural halls, where the latest

literature of interest to farmers may be examined and where lectures are delivered on agricultural subjects. An agricultural bank was established under the Act of 1894 for the purpose of assisting persons in the occupation, of cultivation and improvement of agricultural lands. The land laws and regulations are framed in the liberal spirit characteristic of the Australian States, and land may be acquired by straight out or conditional purchase, by deferred payments with or without residence under specified conditions, or by acquiring land infested with "the poison plant", working men's blocks, free homesteads or grazing lands on advantageous terms.

PASTORAL.

As in agricultural so in pastoral pursuits Western Australia has been somewhat backward, although the steady increase observable in the numbers of live stock depastured in the State augurs well for the future of the industry. The prevalence of "the poison plant" in the Southern districts has been a bar to pastoral enterprise in the past, but in recent years it has become abundantly manifest that the Northern districts of the State are specially suitable to stock-raising. Fresh tracts of excellent grazing country are still being opened up, and considerable expansion may be looked for there in the near future. The best sheep country lies south-west from Kimberley and "extends over the watered districts, following the contour of the coast line to the South-eastern districts". Good cattle country is to be found practically all through the northern portions of the State. At the end of 1903 there were 2,600,633 sheep in the State, and the amount of wool in grease obtained was 13,306,106 lbs. The net value of the wool exported from the State in that year was £ 443,743. The total number of cattle in Western Australia at the end of 1903 was 497,617. Before the gold fields rush, an export trade in horses, of which there were about 82,747 in the State in 1903, had been initiated with the East, but the local demand when the mines were opened absorbed all the available supply. The only pastoral products exported in any quantity at present are wool, hides, and skins; no boiling-down, meat preservation, or freezing being so far carried on in the State.

A FIRST CROP, WESTERN AUSTRALIA.

TIMBER.

One of the staple industries of Western Australia is timber-getting, and during the last few years there has been an enormous increase in the output, the export ranking next to gold in importance. The Western Australian hardwoods, such as jarrah and karri are famed all over the world for their durability, and owing to their capacity for resisting the attacks of the teredo navalis, are both much in request for wharf piles and similar purposes. The forest lands, extending practically over the whole Western and South-western districts are estimated to comprise some twenty million acres with an available supply valued at £124,000,000, capable of lasting at the present rate of consumption some three or four hundred years. The principal trees are: — Jarrah, Karri, Tuart, York Gum, Wandoo, Yate and Sandalwood. Soft woods are singularly deficient, and for building purposes pine, etc. has to be imported. The export of indigenous timber during 1903 was valued at £807,000.

MANUFACTURES.

If a State that has still very far to go before attaining the dignity of being self supporting even in regard to the products of the primary industries, it is scarcely likely that a secondary industry should have reached a stage worthy of anything more than passing attention. In the strict sense of the word, manufacturing in Western Australia has not begun yet, and the number of establishments operating on primary products is small. A considerable proportion of the factories are engaged in the work of modifying, in some respect or another, commodities whose place of origin is beyond the borders of the State, and depend largely upon these importations for the maintenance of their output. The principal industries are those connected with the preparation of food and drink, clothing and textile fabrics, building materials, metal works and machinery. In the first named class, bakeries, breweries and aerated water factories are the most numerous, while water condensing works — a necessary adjunct to the inland goldfield towns, help to swell the total. The establishments engaged on clothing and textile fabrics. are mainly concerned in the making up of material such as millinery, dress goods and

similar fabrics obtained from oversea. In "building materials" must be considered "Forest Sawmilling" which is certainly the most important secondary industry in the State, and one that employs far more hands than any other. At the end of 1901 there were 23 forest sawmills at work, with 3,054 hands, and to these must be added 33 town sawmills and joineries with 629 hands. The timber sawn by the former during the year named amounted to 122,413,865 superficial feet, an increase of nearly ten million feet in the previous year's figures. Under metal works and machinery are classified engineering works, foundries, etc., which in a State utilising so proportionately large an amount of machinery are obviously required. They numbered, in 1901, 44, and gave employment to 1,304 hands. An idea of the small dimensions (in other directions) of the manufacturing industry in Western Australia may be gauged from the following classification of establishments working in 1901, the total number of hands employed being given in parenthesis in each case: — Treating Raw material the product of pastoral pursuits, 8 (62); Connected with Food and Drink, 204 (1,654); Clothing and Textile Fabrics, 106 (1,454); Building Materials, 100 (4,326); Metal Works, Machinery, etc., 57 (2,402); Boat Building and Repairing, 5 (44); Furniture, Bedding, etc., 17 (229); Books, Paper, Printing etc., 44 (881); Vehicles, Saddlery, Harness etc., 49 (471); Heat, Light and Energy 39 (286); Miscellaneous 33 (389).

In 1903 there were 586 manufactories in the State, employing a total of 11,883 hands as compared with 537 factories and 11,300 employees in 1901.

SPORTING.

The State of Western Australia is well supplied with racing clubs, the "sport of kings" naturally exercising a special attraction over a community which includes so large a number of young men engaged in the various pursuits connected with mining. First among these associations is the West Australian Turf Club, whose headquarters are situated on the banks of the Swan River, and access thereto is gained either by road (5 miles), river (7 miles), or train 6 to 7 miles from Perth. The principal races decided under its auspices are the Western Australian Derby (1½ miles), the Perth Cup (2 miles), the Railway Stakes (1¼ miles) and the Maiden Plate (1 mile). The office of the Turf Club is at 69 Barrack Street, Perth. On the goldfields are the Kalgoorlie

and the Coolgardie Racing Clubs, each with a Cup Race as the principal event of the season, the distance being $1\frac{1}{2}$ miles and $1\frac{1}{4}$ miles respectively. The Perth Cup and Kalgoorlie Cup are each a handicap for 1,000 sovs. There is also a Turf Club at Albany and a Jockey Club at Fremantle, both of which hold several meetings during the year and in addition nearly every town of any importance in the State has its local racing organisation.

The Cricket is controlled by the Cricket Association representing six clubs, playing electoral cricket in Perth and the surrounding districts. Each town has of course its local elevens. The West Australian Cricket Ground, excellently situated near Perth, has been granted to the public by the Government and is under the management of trustees. The Australian Game of Football is the principal one played in the State, but the Rugby and Association varieties have also many votaries. The first named is represented by the Western Australian Football Association, and the two latter by the Western Australian Rugby Football Union and the British Football Association. The West Australian Rowing Association was founded in 1886, and affiliated with it are the West Australian, Swan River, and Fremantle Rowing Clubs, each with a strong membership, and the advantages of the Swan River are largely availed of by this branch of sport. The other division of aquatics — yachting — is also extensively followed, the Yacht Racing Association of Western Australia having affiliated with it the Royal Perth Yacht Club, the Perth Flying Squadron, the Freshwater Bay Sailing Club, the Mount's Bay Sailing Club and the Western Australian Yacht Club, the flag of each of which is flown by a numerous fleet. Bowling, golf, tennis, cycling (amateur and professional) all have a strong following; and in sporting matters and organisations at any rate Western Australia is in no way behind the Eastern States.

The field sports, shooting and fishing, have each flourished and at present offer many inducements to their votaries. The unsettled state of the country — comparatively speaking — renders it possible to obtain good fishing or shooting within easy distance of the towns, and the fact that imported game, such as antelope, grouse, hare, pheasants and partridges, has been introduced, constitutes a further attraction. The game laws are comprehensive and provide heavy penalties for their infraction. The Governor may proclaim close seasons for imported or native game either throughout the State or in specified portions of it, and the following birds are strictly preserved all the year

round:— Bitterns, emus, laughing jackasses, magpies, wattle birds, wagtails, robin redbreasts, straw-necked ibises and swans. Permission to hunt imported game must be obtained from the owner thereof. At present the close season is enforced for native game in the strip of country on the west coast from the Murchison River to the Fitzgerald, with a strip five miles wide along the south coast and a block of land at Eucla, 20 miles long by 10 miles deep. The season lasts from July 1st to November 30th with an extension to Dec. 31st for swans, teal and wild duck of all species. North of the Moore River another close season for boobies, frigate birds, pelicans, curlews, sea snipe and other sea fowl lasts from June 1st to September 30th. Fishing is also to some degree controlled by the authorities, and a scale is proclaimed whereby undersized fish of several species are protected under penalties, while it is also prohibited "to fish for, take or remove, in any manner whatever" any trout, Murray cod or eels.

RAILWAYS.

It was not until the seventies that the need of a railway line in Western Australia was found imperative, the small population and sparse settlement of the State up to that time obviating the necessity of entering upon a work which all the Eastern colonies had commenced some score of years previously. The year 1879 saw the opening of a short line from Geraldton to Northampton, a distance of only 34 miles. Progress thereafter was slow, and a lack of sufficient funds to continue railway construction at the required rate induced the Government to depart from the usual Australian practice of keeping the lines as a State monopoly. In the early eighties it was announced that offers would be received for railway construction on the land-grant system, and the outcome was a line of 243 miles, connecting Beverley with Albany, which was opened for traffic in 1889 and became the property of the Government in 1897. Another line constructed about the same time on similar principles was the Midland Railway, still in the hands of a private company. This line is 277 miles in length, and branches off from the main trunk line of the Eastern Railway at Guildford, and, running in a northerly direction, junctions the State line from Geraldton at Walkaway. It is the only line in private hands now carrying passengers, although there are several other private railways laid down for timber traffic

from the great jarrah forests to the main southern line. These lines aggregate about 114 miles in length.

The discovery and opening up of the gold bearing areas in the interior however, forced the Government to take the work of railway construction into their own hands, and the decade beginning with the year 1890 saw considerable expansion. The gauge chosen for all Government lines was the 3 ft. 6 in., and as the country presented few engineering difficulties, construction was, comparatively speaking, rapid. At the present time the railways of Western Australia are subdivided into five systems. The Northern, the Eastern, the Eastern Goldfields, the South-Western and the Great Southern System. The Northern System starts from Geraldton, a town on the coast about 290 miles north of Perth, and runs almost due east to Mount Morgan when it turns sharply to the northward terminating at Cue, 260 miles inland. From Geraldton also a branch runs northward to Northampton (34 miles), while at Mullewa Junction a short line to Walk-away (10 miles) connects the Northern with the Midland systems, the latter being, as before stated, in the hands of a private company. The Eastern System has a total length of 167 miles and extends from Fremantle, through Perth to Northam (76 miles) with branches to Newcastle (13 miles), Beverley (32 miles), Greenhills (30 miles), Perth Racecourse, Owens Anchorage, and the Mahogany Creek deviation. From Northam, the Eastern Goldfields System commences, the line running steadily eastward to Kalgoorlie. From Kalgoorlie three branches diverge to Menzies, Kanowna, and Great Boulder, the two latter being only a few miles distant. The South-Western Railway serves the coastal districts, and its trunk line runs from Perth to Bunbury (128 miles). Branches have been extended to the southward from the latter town to Busselton on Geographe Bay, Bridgetown on the Blackwood River, the Collie Coalfields, Donnybrook and the Canning and Bunbury Racecourses. Here are also several privately owned lines to the jarrah forests at various points. The Great Southern System, once a privately owned line, commences at Beverley and runs through the inland country in a southerly direction to Albany with a total length of 243 miles. The Midland Company's Railway pursues a northerly course from Midland Junction to Geraldton through a sparsely populated district.

On the 30th June 1904 there were 1,541 miles of State owned Railway open for traffic, while 23 miles were in course of construction on that date. The cost of construction had been £ 8,955,929, or an average of £ 5,812 per mile, which is less than that paid by any other State. The total

earnings for the year ended 30th June 1904 were £ 1,588,084 and the working expenses for the period amounted to £ 1,179,624, giving a net profit of £ 408,460. The goods traffic was heavy, the tonnage amounting to 2,281,764, earning £ 1,026,734, while the passenger journeys totalled 10,225,976, earning £ 462,455. The rolling stock included 329 locomotives, 269 coaching vehicles and 5,632 goods wagons.

The passenger accommodation on the Government railways is good; excellent dining cars are provided and the catering leaves nothing to be desired. The fares are similar to those obtaining in other States of the Commonwealth, and for long-distance travel the rates may be approximately set down as 2 d per mile single, and a little over 1½ d per mile return for first, and 1⅓ d per mile single and 1 d return for second class.

The following are the fares from Perth to some of the principal stations, with distance and time taken for journey (by express) in parentheses:

Coolgardie (363 m., 18 h. 8 m.), first class, £ 2.18.3 single and £ 4.7.5 return; second class, £ 1.16.4 single and £ 2.14.6 return.

Kalgoorlie (387 m., 19 h. 12 m.), first class, £ 3.2.3 single and £ 4.13.5 return; second class, £ 1.18.10 single and £ 2.18.3 return.

Albany (340 m., 16 h. 49 m.), £ 2.16.5 single and £ 4.4.8 return first, and £ 1.15.2 single and £ 2.12.9 return second class.

Fremantle (12 m., 38 min.), 1/3 and 1/11 first, and 9 d and 1/2 single and return respectively second class.

Return tickets for distances over 20 miles are available for six months.

FREMANTLE.

Fremantle (32° 03' S. lat., 115° 45' E. long.), the first port of call for all mail steamers on the eastern route to Australia, and the chief port of the Western State, is situated at the mouth of the Swan River about twelve miles from Perth. Until a few years ago the harbour of Fremantle was of such shallow and open character that no large steamers could use it, and the first port of call for mail steamers coming from Europe was then Albany, in the

south-western corner of the State, whence all passengers to the north had to complete their journey by rail, at a time when seventy-five per cent of the arrivals in the State were bound for the goldfields. This roundabout method of reaching them was naturally considered impracticable, and the attention of the Government became centred in the improvement of Fremantle as a port, in order that the largest steamers visiting Australia might berth, land passengers and discharge cargo there. The work was taken in hand in 1892 and practically completed in 1897. The complete scheme provided for the erection of two moles, 4,800 and 2,040 feet long respectively, and built of immense blocks of concrete in order to resist the full force of the gales that blow on the coast. These breakwaters run out from each side of the river to a depth of forty feet, and the portion enclosed by them, once a shallow and treacherous bar, has been dredged out. A reef of rocks at the mouth of the river has been blasted away, and the channel widened and deepened until Fremantle harbour as it now stands is one of the best artificially constructed ports in the Commonwealth. The steamers can now go right alongside the moles, on which lines of railway have been laid, so that the cargo goes practically from the ships' slings into the railway trucks. Outside the harbour and sheltered from heavy weather there is a roadstead at Garden Island about twelve miles distant.

Fremantle is the western terminus of the eastern railway, and the station is well placed as regards accessibility from the shipping, being situated within a few hundred yards from the pier. There are frequent trains daily to Perth, and through communication with York and Albany.

The town has a prosperous appearance and there are several substantial buildings; it is lighted by gas, and has a reticulated water supply. The population in 1902 numbered, including suburbs, a little over 20,000.

Good accommodation may be found at the Federal, the Club, or Cleopatra hotels, besides which a number of boarding houses offer accommodation to visitors.

The convict prison is on Rottnest Island, where also is the Governor's summer residence.

PERTH.

Perth, the capital city of Western Australia, lies about twelve miles inland from Fremantle with which town ample communication exists either by rail, road or river. The

city is pleasantly situated on the north bank of the Swan River, the site having been happily chosen where the stream broadens out into a wide reach of water about $1\frac{1}{2}$ miles in length, known as Perth Water. Perth was founded in 1829, and was until the gold era not remarkable for either architectural or other artificial adornment, but the rush of population and money that set in when the Eastern goldfields were discovered in the early nineties impelled improvement, and during the last ten years the city has been beautified by many buildings and reserves, while the errors of the early years have to a large extent been corrected by an energetic corporation. The convict labour of the early days was responsible for the formation of many good roads, notably the one between Perth and Fremantle. But as a whole the town is not particularly well laid out, and there is a decided divergence in the character, length and breadth of the various streets. The principal suburbs are Leederville, Subiaco, Cottesloe, Claremont, South Perth, Peppermint Grove and Victoria Park. River steamers ply across Perthwater to South Perth at frequent intervals. The population of Perth is about 37,000, the most populous residential areas being Subiaco and Leederville.

Area, Streets, etc. Including a park reserve of 980 acres, the area of the city and suburbs is 4,830 acres. Perth is divided into five wards, each returning three councillors to the Municipal body. The Mayor is elected by the whole body of ratepayers. The assessed annual value of the city property is about £350,000 and the number of ratepayers about 7,000. There are some 65 miles of streets and 50 miles of macadamised roads. The water supply is drawn from Meindays Brook in the Darling Range, there being also a storage reservoir at Mount Eliza, a short distance from the town. The city is electrically lighted. The principal thoroughfares are George's Terrace, Hay Street, James Street, Murray Street, Beaufort Street, Pier Street, William Street, Barrack Street and Wellington Street.

Climate:— The climate of Perth is sub-tropical in character and there are practically only two seasons in the year—summer and winter, the latter being the wet season, lasting from April to October. The summer temperature is high, but though the thermometer is usually at 90 deg. with an upward tendency during the day, towards the evening a cool sea breeze almost invariably sets in. The mean temperature for the year is about 60 deg., the mean maximum being 84 deg. and the mean minimum 46.8 deg. The highest temperature registered during 1903 was 106° and the lowest

PERTH,
WESTERN AUSTRALIA.
.

40¹/₂. The rainfall varies from 25 to 40 inches per annum, and in 1902, which was a "dry year", 27.06 inches fell on 95 days.

Conveyances, Hotels, etc.:— The railway station is at no great distance from the centre of the town, but if required cabs are always procurable.

A recently inaugurated system of trams connecting the suburbs with the city, is now in operation.

There are as in all Australian towns, a number of boarding houses, and several fairly good hotels, the most popular being the Palace Hotel in St. George's Terrace, and the Hotel Esplanade, Bazaar Terrace.

Public buildings:— Considerable activity has recently been displayed by both public and private institutions of Perth in the erection of a better class of building than the townspeople were formerly content with, and the result of that activity is apparent to anyone visiting the city after an absence of some years.

The Town Hall stands on a slight eminence in the very centre of the town, thus occupying a commanding position. It fronts Barrack Street and is a somewhat imposing structure. The Hall itself is capable of holding 2,000 persons.

Adjoining the Town Hall is the Chamber wherein are held the sittings of the Legislative Assembly. A new Parliament House has been projected on a much more imposing scale than the present one.

The General Post Office was the first addition of any importance made to the old block of the Government offices in St. George's Terrace, the building, in the French Renaissance style, harmonising pleasingly with the older portions of the block. The material used in the construction was brick, the ornaments, quoins, pilasters etc. being finished off in cement. A recessed central entrance leads into the spacious postal hall which has many features of architectural interest.

The Public Offices are contained in a solid block of buildings facing south to St. George's Terrace with a facade of 225 feet. In the centre are Post and Telegraph buildings, on the right the Lands and Survey, and on the left the Treasury. A new wing has recently been added in the Renaissance style, four floors in height with a frontage of 95 feet.

The Victoria Public Library in James Street is a fine block of stone buildings containing the Museum, Art Gallery and Public Library. The building was erected in commemoration of Queen Victoria's Jubilee.

The Mint, in Hay Street, is massive in design, built of Cottesloe freestone with Rottneest stone dressing.

Government House is situated in St. George's Terrace, the land in front sloping gradually down to the waters edge. It is a very handsome residence, its towers and colonnade giving it a most picturesque appearance.

The Railway Station in the heart of the city is utilitarian rather than ornamental.

The Swan River Mechanics Institute, recently erected, is a fine stone building at the corner of Hay and Pier Streets, with a large hall, much patronised for public entertainment.

Banks:— The following banks of issue carry on business in Perth:— The "Western Australian Bank", the "Bank of Australasia", the "National Bank of Australasia", the "Union Bank of Australia", the "Bank of New South Wales" and the "Commercial Bank of Australia".

Churches:— The places of worship count among their number some of the finest buildings of the city. "St. George's", the Church of England Cathedral, on St. George's Terrace, is a handsome Gothic edifice, to which a bell tower, "The Victoria", with a fine peal of bells, has recently been added. The Cathedral is capable of seating 2,000 people. The Roman Catholic "Cathedral of the Immaculate Conception" is on a hill at Victoria Square, Murray Street, forming an imposing landmark. The Bishop's Palace and Convent are near it. The "Presbyterian Church" is in Pile Street. The "Trinity Congregational Church", St. George's Terrace, is a fine building, and the "Wesley Church" in William Street is also well designed. There is a Moham-medan mosque and a Jewish "Synagogue" in Brisbane Street.

Hospitals and Charitable Institutions:— The Perth Hospital in Murray Street is an extremely well managed institution, the disposition and arrangement of the buildings being well thought out. The visiting days are Wednesdays and Sundays from 2 to 4 p. m. The Victoria Institute and Industrial school for the Blind is located at Marylands, 2½ miles from the city. There is a Girls' Orphanage in Adelaide Terrace and a School for the Deaf and Dumb in East Perth. The Roman Catholic denomination have a Girls' Orphanage in Hay Street East, a hospital (St. John of God) at Subiaco and St. Mary's Convent in Mary Street. There is also a Boy's Orphanage and an Industrial School, both at Subiaco. A Home for old men and another for old women are also in Perth.

Fire Brigade:— The head station of the Metropolitan Fire Brigade is at the corner of Murray and Irwin Streets. The plant consists of one steam fire engine, 2 horse hose carts, one hand hose cart, one horse curricule fire escape (45 feet) and auxiliary ladder truck. There are 70 electrical alarms connected directly with the station from different points in the city.

Press:— There are two morning papers in Perth, the "West Australian" (1 d.) and the "Morning Herald", while one, the "Daily News", is issued in the evening. There are several weeklies such as the "Western Mail" (price 6 d.), issued from the "West Australian" office, the "Sunday Times" and the "West Australian", also monthly periodicals of various descriptions.

PLACES OF INTEREST AND AMUSEMENT.

Theatres:— The Theatre Royal in Hay Street, a few doors from the Town Hall, is a roomy building, capable of seating about 1,200 people. The St. George's Hall in Hay Street East is a spacious concert hall, and the Queen's Hall, erected by the trustees of the Wesley Church at the corner of Murray and William Streets, is capable of holding over 1,000. The Cremorne Theatre, in Murray Street East, accommodates about 700 people and has attached to it a very fine garden, in which open air concerts and vaudeville entertainments are given during the season.

National Art Gallery:— The Art Gallery of Perth is still practically in its infancy having only been established in 1895. It is located in the Museum Building in Beaufort Street and is subsidized by the Government to the extent of £1,000 per annum. The Arts and Crafts section contains specimens of hammered silver and iron work, carving, ceramics, etc. and a few paintings. It is open to the public from 10 a. m. to 5 p. m. on week days (Fridays excepted) and on Sundays from 2.30 to 5 p. m.

Museums, etc. The Museum Building adjoins the Public Library in Beaufort Street. There are therein valuable biological, botanical, ethnological and other scientific collections. The mineral section includes a comprehensive collection of auriferous rocks presented by donors in various parts of the State. The zoological gallery contains a splendid selection of animals, the West Australian species having had much attention. The bird section is also exceptionally well supplied with West Australian ornithology and contains for the present the Tennant collection of fossils and molluscae.

The historical section, including relics from the wrecks of the Dutch ships "Batavia" and "Zeewyk", is most interesting. The Museum is open daily (Mondays excepted) from 10 a. m. to 5 p. m. and on Sundays from 2 p. m. to 5 p. m.

There is also a museum in connection with the Department of Agriculture in the Western Australian Chambers, and another at the Geological Survey office in St. George's Terrace. The latter contains a valuable selection of the State's mineral specimens. Both are open daily until 4 p. m., Saturday's until 1 p. m.

The Observatory is situated on Mount Eliza, 200 feet above sea level and within the precincts of Perth Park. It is equipped with meteorological and astronomical instruments of the most modern character and possesses a costly refracting telescope. Cards of admission are obtained on application to the Government Astronomer.

Public Libraries. — The Victoria Public Library at the corner of Beaufort and James Streets has a collection of some 50,000 books and pamphlets, with a reading room well stocked with magazines and periodicals, and a newspaper room where journals from all parts of the world are filed. It is open daily from 10 a. m. to 10 p. m. and on Sundays from 2 p. m. to 5 p. m.

The Swan River Mechanics Institute contains a good reading room and a commodious library.

Public Resorts, Gardens, etc. Much attention has of recent years been paid to the enlarging of the air paces of Perth, and several eligible sites have been set aside for the use of the public and are being beautified by the Corporation. Within the city itself are: — King's Park; the Esplanade Recreation Reserve, situated along the banks of the Swan River and used for sports, gatherings and military reviews; Wellington Recreation Reserve, an extensive piece of ground in Wellington Street East; Russell Square, bounded by James, Aberdeen and Parker Streets in West Perth, with carefully laid out grounds and a graceful fountain; Weld Square, between Beaufort Stirling, Newcastle, and Parry Streets, with similar characteristics to the foregoing; Delhi Square, bounded by Wellington, Havelock, Dyer and Collin Streets; Hyde Park, which has been converted into a handsome garden from a swamp reserve, in North Perth; Queen's Gardens at the foot of Hay Street East, has been changed from an old brick yard into what is generally accepted as one of the most picturesque spots within the city boundary; The Public Gardens opposite the General Post Office in St. George's Terrace are prettily laid out

and are open to the public from 9 a. m. to sunset on weekdays and on Sundays from 10 a. m. to 6 p. m.

King's Park on the slopes of Mount Eliza contains over a thousand acres, exceptionally well laid out. Paths and gardens have been formed, summer houses built and, while the indigenous trees and flowers have been preserved, very many others have been induced to grow there. The panoramic view of the city and suburbs obtainable from the Park is most extensive and interesting. A broad road nearly two miles in length and lined with Cape lilac and mulberry trees leads to the Park, which is also accessible by tram. It is open to the public throughout the year.

The Zoological and Acclimatisation Society's Gardens are situated in South Perth (ferry to Mend's street jetty) in a very attractive locality whence splendid views of the city and surrounding country may be obtained. The grounds, which are beautifully arranged, are devoted largely to acclimatised plants, the results of the labours of the committee appointed to deal with the matter. The Zoo contains a very fair collection of wild animals. It is usual to hold open air concerts in the Gardens during the summer months, and the place is a very favourite pleasure resort. Hot water is provided free of charge to picnic parties. The Gardens are open on week days from 10 a. m. and on Sundays from 2 p. m. to 6 p. m.

EXCURSIONS.

Many tours can be made by boat or steamer to different parts of the Swan River, the various landscapes offering many natural beauties for the enjoyment of the excursionist. The drive round from South Perth to the city across the Causeway is also most attractive.

The Point Walter Picnic Reserve is on the south side of the Swan River about midway between Fremantle and Perth and is a popular resort. It can be reached either by road or river.

The Caves. Among the numerous interesting limestone caves in the neighbourhood of Busselton on Geographe Bay, the Yallingup and Margaret River Caves are the best known. They rival in beauty the famous Jenolan and Yarrangobilly caves of New South Wales, and like them their stalactites and stalagmites present an endless variety of fantastic shapes. There are numerous holes and shafts in the district which have not yet been explored and still offer a virgin field to

adventurous spirits. The caves are now under the management of a Board of Trustees, and accommodation is provided for visitors in their immediate neighbourhood. Round trip tickets of the caves, including first class railway fares, coach and accommodation, are issued from the Perth office of the Caves Board as follows:— To Yallingup (three days' trip) £ 3.0.0; to Margaret River Caves (four days) £ 4.5.0; the combined trip to both caves (five days) £ 5.5.0. The round trip tickets are available for fourteen days from date of issue, and coupon holders who wish to extend their stay at the caves may do so by paying their own living expenses during such extension, the tariff at Margaret River Cave House being 7/— per day or £ 2.2.0 per week, and at Yallingup Cave House 10/— per day or weekly terms. Busselton lies about 150 miles south of Perth and the caves between twenty and sixty miles from there.

The Wanneroo Caves, about 30 miles distant from Perth, are also worth visiting, and good shooting and fishing is to be had in that locality.

SOUTH AUSTRALIA.

The foundation of South Australia may, in the beginning, be ascribed to the enthusiasm of that brilliant theorist Edward Gibbon Wakefield, who sought — and sought successfully — to implant his ideas in the minds of the British public. At the time, things in New South Wales were not of the nature to appeal to the English country gentleman, and Wakefield held that this was due to the low price of land. He suggested therefore that a new colony should be formed where land should be, at £1 per acre, comparatively highly priced, and that this should be used as an immigration fund in order to secure labour for the men of capital who should invest. The scheme found favour, and, after much preliminary agitation and organisation, the first shipload of immigrants landed in South Australia in 1836. Strained relations between the new settlers and the authorities began almost immediately, and it soon became apparent that the colonists were not the stamp of men required to open up new land. They preferred rather to gamble in town lots, leaving the tilling of the soil as unfit for their gently nurtured natures. Consequently South Australia entered upon the down grade, and in the early forties a crisis occurred, sufficiently acute to cause the critics' thorough condemnation of the Wakefield system. The English Government at this juncture took matters in their own hands and effectively put a stop to the experimental stage of the new colony's existence. Captain (afterwards Sir) George Grey, was sent out to reorganise affairs on the usual colonisation scheme, followed by the British Colonial Office. Drastic retrenchment, a firm hand on the reins, and last, but not by any means least, the discovery of the Kapunda and Burra Burra copper mines, definitely stayed the downward course, and South Australia began her career of prosperity. In addition to mining, agriculture found a place in the internal economy, and wheat growing began to receive the attention which later on helped to make the colony the foremost producer of bread stuffs in Australia. In the original Act under which South Australia was established, it was provided that when the population reached 50,000 they should claim a constitution for themselves, but though the limit was passed in 1851—52, it was not until 1856 that the constitutional Act was

proclaimed, and the State entered upon the responsibilities of self-government. Her progress since that time has been steady and unmarked by events of any remarkable importance outside their local effect. The State has travelled along the lines laid down by the historical records of her sisters, and though decided checks have been encountered, they have been successfully overcome.

From the visitor's point of view South Australia presents perhaps fewer points of interest than any other Australian State. Its tourists' resorts are not numerous, its landscapes, except round about Adelaide where the scenery is charming, and in the districts where the great vineyards of the State are located, as well as in parts of the South-eastern districts, offer no extraordinary attractions, and its industries considered generally are not of a nature to command the attention or court the investigation of the new-comer from overseas. A trip along the Great Northern Railway impresses one with the realisation of what writers have called the deadly monotony of Australia, and reveals the nakedness of the land in all its striking detail. At the same time, the skill and the energy of those pioneers who are still at work reclaiming the waste spaces of the continent and fitting them for man's occupation, command respect, and the knowledge that in the country through which the train passes, uninviting as it looks, settlers are at work on farm or station, wringing, by untiring perseverance, a livelihood from the soil, must inevitably earn commendation. At the head of Spencer's Gulf there is of course the copper country to visit, and also the smelting works of the Broken Hill Proprietary Company at Port Pirie, where the silver ore, brought down from the Barrier, is treated and the metal extracted. Beyond those places and Adelaide itself however, there is little else to keep the tourist in the State. These remarks do not apply in like degree to the Northern Territory, the capital of which, Port Darwin, and the country around it, is well worth a visit, but as it lies out of the ordinary tourist track it is somewhat "ungetatable" and is usually neglected by the visitor to Australia unless some special purpose takes him there. It is essentially a tropical district in all its characteristics, and a continuous object lesson of the methods employed by the Anglo Saxon in settling such areas.

AREA AND BOUNDARIES.

Including the Northern Territory, South Australia has an area of 903,690 square miles or 578,361,600, acres and is

second only to Western Australia in size. The original colony comprised the strip of land running north from the Southern Ocean to latitude 26° S. between the meridians of 141st and 132nd E. longitude. In 1861 the strip of land lying between the 132nd and the 129th meridians was added thus bringing South Australia's western line contiguous to West Australia's eastern boundary. In 1863 the land to the north of the 26th parallel between 129° and 138° E. longitude was added as the Northern Territory, and the Province of South Australia as it is to day was completed running from sea to sea, its greatest length being 1,850 miles and its greatest breadth from east to west 650 miles. Its boundaries are:— On the west, 129th meridian, on the east, the 141st meridian to latitude 26° S., along that parallel to 138° E., and thence northward by that meridian to the Gulf of Carpentaria, on the south the South Pacific Ocean, and on the north the Indian Ocean, the Arafura Sea and the Gulf of Carpentaria. Its seaboard measures roughly 2,000 miles, the southern coast line (1,100 miles) being deeply indented, while the northern (900 miles) has also a number of bays and inlets.

PHYSICAL FEATURES.

The coast line of South Australia is marked, as has been said, by many indentations. To the south the principal of these are Spencer's Gulf running northward for nearly 200 miles and containing many smaller inlets such as Port Lincoln, Louth Bay and Moonta Bay, St. Vincent's Gulf, extending 85 miles inland, Encounter Bay, Lacapède Bay and Discovery Bay. On the northern coast are Simmens Bight, Blue Mud Bay, Van Diemens Gulf, Melville Bay and Port Darwin. From the map one would imagine that the State was well supplied with inland water in the shape of lakes, but most of these, such as Lakes Torrens, Eyre, Amadens, and Blanche, are salt, receiving the storm waters of the interior, which quickly evaporate. The fresh water lakes are mostly in the south-eastern corner and include Lakes Alexandrina and Albert, through the former of which the Murray flows, Hope, and a collection of small lakes of which the famous Blue Lake of Mount Gambier is one. The Coo-wing, formed on the sea coast by a narrow sand spit about 100 miles long, is a lagoon rather than a lake. In the Southern division the only river of any importance is the Murray, which for the last part of its course flows through a rich agricultural district in the south-eastern portion of the

State. Among the lesser streams may be mentioned the Wakefield, Hindmarsh and Torrens, from which Adelaide partly derives its water supply. The Northern Territory is on the contrary well supplied with inland waters, the Roper, the Victoria, and Adelaide Rivers being navigable for considerable distances. None of the defined ranges in the south attain any great altitude. The highest points in the Mount Lofty Range, running from Cape Jervis northerly, are Mount Lofty (2,334 feet) and Lagoon Hill (2,235 feet). From the head of Spencer's Gulf, the Flinders Range extends northward for several hundred miles to Cape Blanche, Mounts Remarkable, Brown, Arde and Serle, each about 3,000 feet high, being its chief peaks. The Hummocks form the backbone of the peninsula between St. Vincents and Spencer's Gulf, and the Gawler Range, in the Port Lincoln Peninsula, extends from Port Augusta towards Streaky Bay. In the heart of the country is the Macdonnell Range, a remarkable locality, while to the south of the Northern Territory are various highlands and broken tablelands. There are also several isolated peaks of a volcanic nature. Except for the Madonnell Ranges the centre of South Australia is a vast plain, portions of which are fertile, while others comprise the true desert country of the continent, at one time the bed of a vast inland sea, which supports little or no animal life, and over which it is extremely difficult to travel owing to the lack of water. But it must be remembered that the impression founded that the interior of South Australia was wholly a desert is quite erroneous, and that on much of the country pronounced useless by the explorers pastoral occupation is now fairly extensive.

CLIMATE AND RAINFALL.

As the territory of South Australia covers about 27 degrees of latitude, it will be readily understood that the climate taken as a whole presents considerable variations. In the Northern Territory of course, which reaches to within 90° of the equator, it is purely tropical, but the elevated tablelands which are to be found there, materially reduce the temperature. In the centre of the State, which is also the centre of the continent, the climate is essentially continental, and the thermometer in the summer rises to extreme heights, frequently registering over 120° in the shade. The climate of the Southern districts has been likened to that of Sicily or Italy, and for nine months of the year is very pleasant. The coldest month are June, July, and August, and the summer months are the only

130

135

140

disagreeable ones of the year. During that time the hot winds blowing from the interior raise the temperature sometimes to over 100° in the shade and the thermometer exceeds 90° for quite a third of the time. But the air is dry and the humidity which makes an atmosphere so unpleasant is absent. This dryness makes the country very salubrious and there is only a small proportion of epidemic, febrile or tubercular diseases to be noticed. The rainfall of the State is a low one, the quantity registered in the Central districts reducing the average. Even at Adelaide the average for the last 60 years has been less than 21 inches, and further north the annual rainfall does not reach half that figure. The tropical character of the Northern Territory conduces to an abundant rainfall, and in the wet season there (January and February) the downpour is particularly heavy, while the annual average is between 60 and 70 inches. That part of the State is also subject to hurricanes which inflict serious damage to property. For 1902 the rainfall at typical stations was as follows:— Adelaide (S.) 18.01 inches; Robe (S.), 25.50 inches; Alice Springs (Central), 7.70 inches; William Creek (Central), 5.51 inches; Port Darwin (N.), 57.91 inches.

POPULATION AND VITAL STATISTICS.

The latest available figures up to December 31st 1903 give the population of South Australia (including the Northern Territory) as totalling 368,823 persons. This total is exclusive of the aborigines, of which race it was estimated that at the time of the census there were 27,000, although their total number must approximate to 50,000. The centralisation of population in the cities is more marked in the case of Adelaide than of any Australian town, no less than 45.57 per cent of the total population being resident in the capital.

According to the census of the 31st March 1901, which enumerated the population of South Australia at 362,604, the birthplaces of the people were specified as follows:—

South Australia	271,671
Other Australian States	17,771
New Zealand	712
United Kingdom	56,860
Other British Possessions	1,336
Germany	6,663
Chinese Empire	3,253
Other Foreign Countries	3,593
At Sea and Unspecified	745
Total...	<u><u>362,604</u></u>

It will be seen from the above table that natives of Germany exceed in number the natives of any other foreign country, and this is due to the extensive settlement of immigrants of that nationality in the South-eastern districts. The large proportion of Chinese is due to the influx of that race in the Northern Territory.

While showing the decline in birth rate noticeable in all Australian States, the number of births in South Australia in 1901 was 9,111 giving a rate per thousand of 29.09, figures only exceeded by Western Australia with 30.49. In the 1903 census, conditions were however reversed and South Australia with a rate of 23.41 per thousand showed the lowest birth rate of any Australian State.

The deaths in the same year numbered 3,951, or at the rate of 10.74 to every thousand of the population, a figure also slightly below that of any other Commonwealth State. From a comparison of the 1900 figures the causes of the deaths of the 3,774 persons who died in that year may be attributed as follow:—

Specific febrile or zymotic diseases	423
Parasitic diseases	14
Dietetic diseases	18
Constitutional diseases	662
Developmental	413
Local	1,796
Violence.....	240
Ill defined	208
	<hr/>
	3,774
	<hr/>

CONSTITUTION.

South Australia has the distinction of being the first State of the Commonwealth to recognise that the consummation of Federation lessened the necessity for so large a local legislature, and to set about a reform of the Constitution on economical lines. The Constitution Amendment Act of 1901 reduced the number of members of both Houses of Parliament from 24 to 18 in the case of the upper and from 54 to 42 in the case of the lower Chamber, and provided further that the number of responsible Ministers should not exceed four. The parliamentary system is bicameral, both Houses being elective. The Upper House is chosen on a property qualification by adult voters from four provinces, one of which (the south) returns 6 and the others four each. The members are elected for 6 years and are reimbursed to the extent of £ 200 per annum each and a

free railway pass. The usual disqualifications for electors and members obtain. The Lower House of 42 members is elected on a residential qualification, for three years and the reimbursement is the same as that for the Legislative Council. South Australia was the first Australian State to extend the franchise to women. The executive authority is in the hands of the Governor, appointed by the Crown. The powers of both Houses are similar, except that the Upper House cannot originate or alter money bills. •

EDUCATION.

Primary education in South Australia is free, secular and compulsory within the ages of 7 to 13, and is controlled by a responsible Minister with an inspector general and other officials. The department also control two secondary schools — the Advanced School for girls and the Agricultural school. According to the latest figures (1903) there were 715 primary schools in South Australia with 1,311 teachers, an average pupil enrolment of 57,145, and an average annual attendance of 42,587. The net expenditure for 1903 (excluding the sums spent on school premises, £ 11,805) was £ 136,547. Secondary education is almost entirely in the hands of private and denominational schools, but the Government, by offering bursaries and scholarships, hold out encouragement to boys and girls to proceed further with their education. There were, at the end of 1903, 205 private schools with 654 teachers and an average attendance of 9,330, in South Australia. The Adelaide University is in receipt of a liberal endowment from the Government, and though the number of students is comparatively small, a very high standard of instruction is maintained. In addition to the annual endowment, the University has a perpetual endowment of 50,000 acres of land from the Government while numerous private benefactors have further increased its efficiency by providing an income for chairs or scholarships. Technical education is on a high level in South Australia, and in addition to the School of Agriculture already referred to, there is an excellent School of Mines in Adelaide in receipt of Government and private endowments.

RELIGION.

• South Australia was the first of the Australian States to withdraw (in 1821) State aid to religion, and since then all religions are considered equal. The Church of England

has the largest number of adherents in the State, next to it being the Wesleyan and other Protestants, while the Roman Catholics occupy the third place. The proportions of the different denominations to the total population at the census periods were: Church of England 30.2; Roman Catholic 14.8; Presbyterians 5.5; Wesleyan 25.5; Congregationalists 3.8; Baptists 6.2; Hebrew 0.2; All other 14.1, a considerable part of the latter being made up of the German Lutherans. Adelaide was erected into an episcopal see in 1847, while the Northern Territory is nominally under the jurisdiction of the Bishop of Carpentaria. The Synod meets at Adelaide every year. To March 31st 1902 there were 94 clergy, 177 churches and 10,775 communicants for the preceding twelve months. Adelaide is also an Arch-diocese of the Roman Catholic Church, while a diocese of the same denomination has been established at Port Augusta. The latest statistics showed 103 Roman Catholic Churches, with 26 regular, and 42 secular priests. The Methodist Church of Australia has a membership of 14,769 in South Australia, with 124 ministers and 476 Churches. There are 20 ministers and 49 churches of the German Evangelical Lutheran Church, and the Presbyterians are represented by 19 ministers, 25 Churches and 1,570 communicants. The Congregational Church numbered 48 places of worships and 32 ministers.

FINANCE.

The financial year for South Australia, as for the other Australian Colonies ends on the 30th June in each year. For the 1903—4 period, the revenue of the State, including the Northern Territory (though the total thence comprises barely a fifth of the whole) amounted to £ 2,568,101, the sources of which may be detailed as follows:— Taxation (other than Federal) £ 353,434; Railways and Tramways, £ 1,178,396; Lands, £ 181,608; Surplus returned from Commonwealth, £ 556,949; All other sources £ 297,714. The revenue collected by the Federal Government is mainly from Customs and Excise dues, while the State taxation is derived chiefly from the Land and Income taxes imposed and from the Stamp and Succession duties. The expenditure for 1903—4 by the State was £ 2,707,253, including the Northern Territory. Of this expenditure £ 1,120,731 was devoted to interest and charges on the public debt, £ 693,600 to the working expenses of Railways and Tramways, £ 154,220 to Public Instruction, and £ 738,702 to all other charges. The total public debt on June 30th 1904 was

£28,593,645, the loan expenditure for the year amounting to £415,727.

In all there are seven banks of issue operating in South Australia, only one of which has its head quarters in the State—the Bank of Adelaide. For the June quarter of 1904 the notes in circulation in South Australia not bearing interest amounted to £389,550, the deposits not bearing interest to £2,434,255 and deposits bearing interest to £3,941,012, giving with other returns total liabilities amounting to £6,826,298. The total assets on the same date were £6,393,273. There is, properly speaking, no Government Savings Bank in South Australia, but an institution managed by trustees fulfils the functions. On the 30th June 1904 the total deposits in this bank were £4,202,637, which gives a higher average per head of population (£11.8.3), than any other Commonwealth State.

COMMERCE AND SHIPPING.

The total value of all imports into South Australia for the year 1903 was £6,718,819, the principal items being: Drapery; Cottons; Sugar and Molasses; Drinks and Stimulants; Timber; Coal and Coke; Live Stock, Wool (principally for re-export); Silver Lead and Ore. The last named comes borderwise from Broken Hill and is all re-exported after treatment at the Port Pirie smelting works. The total value of the exports for the same year was £8,443,243, and among the chief items were: Flour, Wheat, Wine, Wool, Hides and Skins, Silver Ore and Bullion, Silver Lead etc. and Copper.

Adelaide being the terminus of the great trunk railway which traverses four States—South Australia, Victoria, New South Wales and Queensland, the mail steamers naturally call there, or rather at Port Adelaide, for the delivery of the mails. This circumstance adds considerably to the total tonnage entered and cleared for South Australian ports, and lifts it very much above the figures which would be proportionate to the State's population and resources. In 1903, the returns, including the Northern Territory, gave 4,280,890 tons entered and cleared.

MANUFACTORIES.

South Australia is not a manufacturing State, and the industrial section of the community is comparatively small. The total number of factories under the supervision of the Inspector under the Act, at the end of 1903 was 1,339, and

the number of persons employed was 18,644. Most of these factories were employed in the treatment of perishable products or the manufacture of clothing for local consumption. But there are numerous flour mills, with an extensive connection beyond the borders, while the treatment of silver lead ores and other metal and machinery works give employment to far more hands than any other class of the manufacturing industry. The smelting works at Port Pirie are very extensive and employ, directly or indirectly, some thousands of hands.

MINING.

South Australia, in regard to its minerals, has certainly been a country of "ups and downs". It is known that large deposits of copper, iron, and silver lead exist, and at one time the output of the former was very great indeed. In 1843 the discovery of the Kapunda mine, followed by the great Burra Burra mine in 1845, saved the young Colony from a serious financial crisis, and copper did for South Australia what later on gold did for Queensland, lifting it straightway into the path of prosperity. The Wallaroo and Moonta mines proved even richer than Burra Burra, and to the end of 1903 the value of copper produced in South Australia totalled the enormous sum of £23,726,585. Of late years the production has not been so excessive, but a revival is taking place, and copper to the value of nearly half a million was taken out in 1903. The iron deposits of the State have not been worked so far, although the Government offers a bonus of £2,000 for the first 500 tons of pig iron produced. Until recently, the gold production of South Australia has been small, though the metal has been discovered in small quantities in many places, and at times alluvial workings such as Teetueka created quite an excitement, although on being worked, the deposits, or at any rate richest part of them, were soon exhausted. The value of gold raised in the State up to the end of 1903 was £2,573,357, the value of the gold produced during the year being £90,031. A few years ago considerable excitement was occasioned by the reported richness of the Arltunga Field, and a "boom" in the properties there situated set in during the early part of 1903.*) From May 1898 to

*) Arltunga is nearly 1,100 miles north of Adelaide and about 400 miles from Oodnadatta, the present terminus of the South Australian transcontinental railway. The fares by rail to Oodnadatta are: single, first, £5.14.0; second, £3.11.9. By coach from Oodnadatta £9. The route is on the whole difficult, and one not to be attempted without good horses. Most of the carrying is done by camels.

TOWN OF MOUNT GAMBIER AND LAKES
SOUTH AUSTRALIA.

the end of October 1902, 2,861 oz. gold were raised on the field, and the opinions as to its supposed wealth were most optimistic. Since then, however there have been no extraordinary developments. A very limited amount of silver has been produced in South Australia, but the State benefits largely by the import into it of the product of the Broken Hill Mines and the necessity for keeping them supplied, the bulk of the trade passing over South Australian lines, practically all the ore going for treatment to Port Pirie. At the present time South Australia produces far less metals and minerals (from the value point of view) than any other State in the Commonwealth, the figures for 1903 being only £583,926. The Northern Territory has already been proved to be rich in minerals, and numerous important discoveries of gold, copper, tin, lead, iron etc., have been made. The auriferous area is being worked with encouraging results, and both alluvial and quartz mining employ a fair amount of labour.

AGRICULTURE AND DAIRYING.

Per head of population, South Australia (exclusive of the Northern Territory) has a greater area under cultivation than any other State of Australia, and is second only to Victoria in the number of acres under tillage. The State is chiefly remarkable for wheat and vine growing, and out of a total of 2,256,824 acres, in 1903, these two branches of agriculture were responsible for 1,711,174 acres and 22,617 acres respectively. Other crops were:— Oats, 57,558 acres; Barley, 28,697 acres; Orchards, 18,725 acres; Potatoes, 8,616 acres; Hay, 370,152 acres, and Green Forage and sown grasses 43,359 acres. In former years South Australia earned the title of the "Granary of Australia" and in most years she has a surplus of grain for export to other Australian States and to Great Britain. She now ranks third on the list as a wheat grower among the Commonwealth States, being preceded in that respect by Victoria and New South Wales. The production of the 1903 harvest was 13,209,465 bushels, while the 1901—2 harvest returns showed a yield of only 8,012,762 bushels of wheat, but the harvest in that year was certainly a failure. South Australian flour is held in high estimation, and in 1901—2 157,263,680 lbs. were exported. The wheat exports for the same being 6,087,863 bushels. The soil of South Australia is especially suitable for vine growing, and the production of wine for the year 1903 amounted to 2,345,270 gallons. South Australian wines have long been in demand in the other States, as well as Great Britain and Europe.

The export trade in wine has been fostered by the Government, who, as far back as 1894, established a wine and produce depot in London through which pass the State's exports. Other crops garnered for the 1903 period were: Oats, 902,936 bushels; Barley, 487,920 bushels; Potatoes, 31,415 tons; Hay, 479,723 tons. During the recent severe drought experienced in the Eastern States, South Australia, which had been better favoured by rains, was able to supply them with a considerable quantity of agricultural produce, and her farmers reaped a harvest in more ways than one. Dairy farming has so far not reached the dimensions of either Victoria or New South Wales, but butter making has, since 1894, when the Government offered a bonus on exports, been making steady progress. In 1903 the production was 5,996,000 lbs. and an export trade has been established with London, though at the same time it must be mentioned that the State was not in a position to fully supply local requirements and had to import both butter and cheese. Bacon and ham and similar swine-products to the value of £ 15,183 were exported in 1903. An Agricultural College has been established at Roseworthy and there is also an agricultural school at Adelaide. Under the State Advance Act, a State Bank has been instituted for the purpose of making advances to farmers and others on the security of their holdings. The Government further considered the agriculturists by instituting a central bureau at Adelaide with some hundred branches in the country, for the dissemination of agricultural information.

PASTORAL.

Despite her large area of available lands South Australia has never been prominent as a pastoral State. Sheep breeding has received the most attention, though the flocks never even approached the totals attained on the eastern side of the continent. The highest total of sheep depastured in the State was reached in the early nineties, when a little over seven million were recorded, but since then the total has declined, and at the end of 1903 the aggregate was 5,350,258. In cattle, the State has never much exceeded the half million, and in 1903 the numbers were 536,580, while at the same date there were 192,411 horses within the State boundaries. The Northern Territory has been found to be a locality especially suitable for cattle raising, and the herds there are yearly on the increase, horse breeding also proving to be a lucrative pursuit. In 1903 wool was produced to the

extent of 46,066,517 lbs. in grease, the net export value being £ 1,239,744. The frozen and preserved meat trade has not attained great importance up to the present, though some meat works have been established both in the South and also in the Northern Territory. The export of frozen, fresh and chilled beef for 1901 amounted to 3,449,585 lbs., valued at £ 60,125, while of preserved meats, extracts, etc., the figures were 1,868,752 lbs., and £ 30,642 respectively. The export of rabbits in South Australia has become an important industry, and its value in the same year was £ 10,489.

SPORTING.

The sports and pastimes in South Australia are similar to those obtaining all over the continent. Horse-racing, cricket, football, athletics, tennis, aquatics, shooting and fishing all find their votaries, and the love of sport is here as strongly marked as elsewhere. The premier racing club is the South Australian Jockey Club with a course at Morphettville, about 5 miles from Adelaide, and its principal races are:— South Australian Derby, ($1\frac{1}{2}$ miles); the Metropolitan Plate (4 furlongs); St. Leger ($1\frac{3}{4}$ miles); Adelaide Cup (1 mile 5 furlongs); Goodwood Handicap ($\frac{3}{4}$ mile). The Adelaide Racing Club has a course at Victoria Park, and there are several country clubs with good courses and a popularity in metropolitan stables. One of the most popular one-day race meetings is that held at Onkaparinga every Easter. (See also Excursions.)

The South Australian Cricket Association consists of seven affiliated clubs, the Adelaide oval being under the Association's control. Interstate teams from Victoria and New South Wales visit Adelaide every year, and a South Australian team plays matches in Sydney and Melbourne. In football the Australian game is followed, and teams play interstate matches with Victoria during the season. There are several sailing clubs, the principal ones being the Holdfast Bay Yacht Club and the Royal South Australian Yacht Squadron, and the Adelaide Rowing Association with five clubs under its authority. A crew from South Australia is chosen yearly to take part in the interstate eight-oar race.

In shooting, South Australia, or at any rate the Northern Territory can offer more excitement than the other States. In the Northern Territory are to be found buffaloes, which afford excellent sport with an element of danger in it. Several extraneous birds and animals have been introduced into the State at various times for the purpose of acclimat-

ising them and the efforts have on the whole met with success. The close season for pheasants, partridges, grouse, Californian quail, white swans, deer and antelope begins on the 1st September and ends on the 31st March. For kangaroos the close season lasts from the 1st November to the 30th April. From the 1st June to the 14th December emus, black swans, wild geese and turkeys, plover and ducks of all descriptions are protected.

RAILWAYS.

On the 30th June 1904 there were 1,736¹/₄ miles of railway open for traffic in South Australia, of which about two thirds were of the 3ft. 6in. gauge while on the balance of the lines the 5ft. 3in. gauge has been adopted. It is thus possible to travel right through from Adelaide to Melbourne without the necessity for changing carriages which exists between Melbourne and Sydney, and between Sydney and Brisbane. The total cost of construction and equipment until 1904 the same date was £13,517,727 while the gross earnings for the year amounted to £1,160,639, and the working expenses to £675,395. The number of passenger journeys made was 9,747,412, the goods tonnage carried was 1,482,450 and the live stock tonnage 33,171. For the purposes of management the railways of the State are divided into five systems. The main trunk line of the Southern system may be considered to be the link between Adelaide and the Victorian Border on the 5ft. 3in. gauge, with a length of 265¹/₄ miles, and forming the last part of the great transcontinental system which is continuous from Gladstone in Queensland, through the Eastern States. At Mount Barker a line to Port Victor branches off. At Wolsely near Serviceton, a line runs due south to Narracoorte and Mount Gambier, right down in the south-eastern corner of the State, and from the latter town another branch has been extended to Beechport. From Narracoorte a short line runs to the coast at Kingston on Lacapade Bay. The Midland system also on the 5ft. 3in. gauge, has a length 236³/₄ miles and runs north to Terowie with a north-easterly deviation at Roseworthy to Morgan on the river Murray (74³/₄ miles). From Terowie the great Northern system commences on the 3ft. 6in. gauge running northwards through Petersburg, Quorn and Strangways to Oodnadatta, a distance of 550 miles from Adelaide. At Petersburg the line from Cockburn on the New South Wales border junctions it, bringing in all the Broken Hill traffic. There are also branches to Port Pirie, Wallaroo and Moonta, and Port

Augusta, all on Spencers Gulf, and with a connecting line between the feeders to Wallaroo and Port Pirie. In the Northern Territory a start has been made with a transcontinental section intended eventually to meet the Southern system that now stops at Oodnadatta, and a line has been laid from Port Darwin to Pine Creek and a station on the overland telegraph line. Several projects for the construction of transcontinental lines have been periodically set out, but at present there seems no immediate chance that a scheme having for its object the junctioning of Oodnadatta with the Pine Creek terminus of the Northern Territory Railway, will eventuate.

ADELAIDE.

Adelaide, in latitude $34^{\circ} 57'$ S., longitude $138^{\circ} 38'$ E., the metropolis of South Australia, may be considered as one of the model cities of the Commonwealth. The city was founded in 1837 by the colonists whom the enthusiasm of Edward Gibbon Wakefield had persuaded to emigrate to the newly formed province of South Australia. It was laid out in 1837 by Colonel Light and, from the nature of the settlement, its founders had not to contend with the fortuitous collection of humble dwellings set about in all directions which in some cases hampered the designers of other towns on the continent. As a consequence Adelaide, in its plan, follows more closely the canons of city buildings than does for example Sydney, and those who subsequently took in hand the work of utilising to the best advantage the natural features and the opportunities for artificial adornment which presented themselves, found their task much easier by the forethought of the original settlers. The business portion of the city, known as South Adelaide, is built nearly in the form of a square with its broad streets, in many cases planted with trees, running at right angles to each other. The plan of this part of the town is most symmetrical in appearance, with its sharply defined limits, beyond which are the park lands: South, East, West and North, its central square (Victoria) and its four subsidiary squares, Light, Hindmarsh, Whitmore and Hunter—all equidistant from the centre and forming the corners of another parallelogram contained in the city boundaries.

Adelaide is prettily situated, six miles from the Gulf of St. Vincent, with the blue slopes of the Mount Lofty Range rising a few miles beyond the city to a height of over 1,600 feet, the highest point of the town being about 150 feet. The city itself lies on a large plain, and the

suburbs extend out in all directions. The town is divided into North and South Adelaide, the former being mainly used for residential and the latter for business purposes. The two are separated by the River Torrens, which art has transformed into an extensive lake, from the natural stream it once was. The population of the city and suburbs according to the last census (December 31st 1903) was 168,066.

The distance from Adelaide to Melbourne by sea is 504 miles.

Area etc. The area of Adelaide is 3,700 acres, including 1,715 acres of public parks and 549 acres reserved for Government purposes. There are also 59 acres of squares or places. The city is bounded by the park lands in all directions, the delineating thoroughfares being the North, South, East and West Terraces. Municipally it is divided into six wards, Hindmarsh, Gawler, Grey, Robie, Young and MacDonnell, each electing one alderman and two councillors. The mayor is elected by the whole body of the ratepayers as are also the aldermen. The number of ratepayers on the city roll is over 13,000, and the assessed annual value of city property in 1905 was £ 450,750, and the capital value £ 9,158,700.

Climate. The climate is dryer than that experienced on the eastern seaboard, and for the greater portion of the year weather conditions are really delightful, approximating to the most agreeable spots on the shores of the Mediterranean. It is only in three summer months that the hot northerly winds occasionally render conditions disagreeable and the thermometer rises to the neighbourhood of 100 degrees. The climate has however, the reputation of being very salubrious, and even the heat, being dry, has less of the unpleasantness which characterises the humidity of Melbourne and Sydney. The winter months are especially bracing, and though frosts occur, the mean minimum temperature is well above 40 deg., and freezing point is seldom reached. On the average Adelaide has about 120 days in the year upon which rain falls and for the last 60 years the mean rain fall has been 20.88 inches per annum. The wet season falls in the winter months.

Waterworks and Drainage. The water supply of Adelaide is one of the boasted features of the city, and recent additions thereto, comprised in the Happy Valley reservoir, have made it one of the most complete. The works feed an area of more than 100 square miles, the supply being drawn partly from the river Torrens and partly

from the Onkaparinga River. The former supplies the Thorndon and Hope Valley reservoirs, and the latter feeds the Happy Valley reservoir, the catchment weir being 268 feet in length and 38 feet in depth. The reservoir itself is, when full, 65 feet in depth with a storage capacity of 2,750,000,000 gallons. Between the catchment area and the reservoir is an inlet tunnel 16,608 feet long, while from the reservoir to the city, four mains, 18 inches in diameter, carry the water. The total length of pipe of all sizes reticulating the city and suburbs is 481 miles. The deep drainage system has been most successfully adopted in Adelaide. The sewage is conveyed to a farm some 4 miles distant to the north and there used for cultivation purposes, the farm showing a good profit every year.

Streets. There are ninety-three miles of streets within the boundaries of the municipality. The principal streets running from north to south are East Terrace, Hutt Street, Pulteney Street, and Harison Street, King William Street, Morphett and Brown Streets, and West Terrace. From east to west there are North Terrace, Hindley, and Rundle Streets, Currie and Grenfell, Weymouth and Pirie, Franklin and Flinders, Grote and Wakefield, Gouger and Angas, Wright and Carrington, Sturt and Halifax, Gilbert and Gillies and South Terrace. The streets enumerated in pairs above are practically the same thoroughfare divided, in the case of those from north to south by Wakefield and Grote Streets, and in the case of those from east to west by King William Street. King William Street is a fine broad way two chains in width, running right through the centre of the city and lighted by electricity. The principal business premises are located in Hindley and Rundle streets.

Arrival. Mailboats anchor in Largs Bay, about a mile and a half from shore. Tenders ply between the vessel and railway pier where luggage must pass Custom examinations. Trains leave for Adelaide on week days about once every half hour from 7.15 a. m. to 11.28 p. m., Sundays about hourly from 9.30 a. m. to 10.10 p. m. Fares 1/— first and 8 d second class single, and 1/6 first and 1/— second class return. A new breakwater is projected near Light's Passage to form a harbour with a minimum depth of 30 feet, allowing mail steamers to load and discharge there instead of in the open bay.

Railway Stations. The principal Railway station in Adelaide is on North Terrace, and most of the long distance and suburban traffic terminates there. The railway to Glenelg however, terminates at a station adjacent to Victoria Park in the centre of the city.

Tramways. Adelaide is not up-to-date in her system of city locomotion, and the old fashioned horse trams still traverse her streets, though for some time past there has been talk of converting them into electric traction. Most of the principal thoroughfares are traversed by tramlines, running out into the suburbs. The following suburbs are connected by tram with the city:— North Adelaide, Kent Town, Kensington, Norwood, Walkerville, Hindmarsh, Mitcham, Parkside and Hyde Park, Prospect and Enfield, Goodwood, Maple, Paynham and Paradise, Burnside and Henley Beach (penny sections).

Cabs, both hackney and hansom are plentiful, the fares being, if hired by time, 1/— for every quarter of an hour within the city boundaries; by distance, 1/— for first half mile or less.

Hotels. The South Australian, North Terrace Railway Station, from 10/— per day. Room only from 5/— per day.

The Gresham, two doors further on, corner of King William Street and North Terrace, 10/— per day. York Hotel, Rundle Street, 10/— per day. Newmarket Hotel, North Terrace, 8/— per day, 50/— per week. Imperial Hotel, corner King William and Greenfell Streets, 8/6 per day, 42/— per week. Southern Cross Hotel, 8/— per day. 50/— per week. The Grand Coffee Palace, Hindley Street, 6/— per day, 30/— per week.

Boarding Houses, (from 20/— to 40/— per week) are numerous and may be selected from advertisements in daily papers.

Restaurants. Beach and Sons, Rundle Street. Taylors, King William Street, (chiefly business lunch).

Cafés. Kindermann's Cafe, Rundle Street.

Public Buildings. The Town Hall and Municipal offices are situated in King William Street, and the buildings are a conspicuous feature of the thoroughfare. The Albert Tower, which rises from the pile to a height of 145 feet, has a peal of 8 bells. The main hall, containing the grand organ, is 108 feet long by 67 feet broad and 44 feet high, and is provided with a gallery. Though comparatively speaking small (it has only 70 stops), the organ is a well toned instrument, and upon it public recitals are given by the City Organist on certain afternoons and evenings. Attached to the Grand Hall is the Banqueting Chamber, an ornately designed apartment, and beneath this is the Municipal Chamber, another handsomely fitted room, upon the walls of which are portraits of the civic dignitaries. It is the

KING WILLIAM STREET, ADELAIDE

custom in Adelaide at the first meeting of the new Municipal Council to drink to the memory of Colonel Light, and on this occasion a silver bowl is used which is one of the most prized possessions of the Municipality.

The new Parliament Houses, of which only part is as yet erected, are at the junction of North Terrace and King William Road. Its walls are of Kapunda marble, and, when completed, it will be one of the most imposing structures in the Commonwealth. The library is a comprehensive one of some 15,000 volumes.

The General Post and Telegraph Office, facing the Town Hall on the opposite side of King William Street and fronting Victoria Square in the centre of the city, is built of white freestone with a clock tower 150 feet high. The clock-dials are illuminated at night and are visible from a considerable distance. An excellent view of Adelaide and its environs may be obtained from the tower.

There is also a Sub-Post and Telegraph Office at Railway Station. Ordinary letters may be posted on maildays at the G. P. O. until 11.15 a. m., registered letters and parcels until 10.15 a. m. Late letters until 12.15 p. m. (2½ d. late fee) or at Railway Station until 12.30 p. m. (6 d. late fee).

The English mail leaves Adelaide every Thursday.

The Government Offices are for the most part located in two solid looking buildings of stone, facing Victoria Square, erected more with an eye to usefulness than ornament.

The Supreme Court and other Court Houses are adjacent buildings, also facing Victoria Square at the corner of King William and Gouger Streets.

Government House entrance gates are at the intersection of North Terrace and King William Road. The vice regal residence is old fashioned in appearance and not very handsome from the exterior. The Governor's summer residence at Marble Hill, one of the highest points of the Mount Lofty Range, is most picturesquely situated. It is distant about 12½ miles from Adelaide and is about 2,000 feet above the level of the sea. The edifice is substantially built of stone, with a tower some 70 feet high and stands in about 400 acres of ground.

The University on North Terrace, is not a particularly large building, but the design (decorated Gothic) redeems it from obscurity and renders it worthy of some attention.

The Exhibition Building on North Terrace is the permanent structure erected in 1887 for the purpose of the Exposition, which in that year was held to commemorate the jubilee of the colony. It is a substantial looking building on North Terrace, to the east and north of the University, and at present is used for Agricultural and Horticultural and other shows, while the Technological Museum, the Chamber of Manufactures and the School for Mines and Industries are also accommodated there. The grounds surrounding the building are some 18 to 20 acres in extent.

The School of Mines and Industries on North Terrace, which has just been completed, is a fine building, whose erection is mainly due to the beneficence of Mr. George Bookman. The School has a complete equipment of appliances and appointments necessary for instruction in all branches of mining, and is well worth a visit.

The City Baths, opposite the Government Printing Office in King William Street consist of two swimming baths and a Turkish bath, all of them being commodious and well appointed. It may be mentioned that bathing is also allowed in the River Torrens before 7.30 a. m. daily, and on Sundays up to 9 a. m.

The Institute, which includes the Public Library and Reading Room, is a solid looking edifice on North Terrace, built at a cost approximating to £100,000.

The Banks and other business houses in Adelaide, are in several instances decided ornaments to the city. The Union Bank of Australasia, an imposing structure built of cut stone, and the English, Scottish, and Australian Bank in the Gothic style, are notable examples. The Exchange Buildings in Pirie Street constitute a fine block of buildings in white freestone, embellished with a sculptured figure of Minerva in the centre.

The Young Mens' Christian Association has erected a very solid pile of buildings at the west corner of Grenfell Street and Gawler Place, at a cost, including furniture and fittings of about £30,000.

Banks. Of the eight Banks doing business in Adelaide, all, with the exception of the State Bank of South Australia, are situated in King William Street. Banks open daily from 10 a. m. to 3 p. m., Saturdays from 10 a. m. to 12 a. m.

The following is a list of the banks:

Bank of Australasia; the Union Bank of Australia, limited; the National Bank of Australasia, Limited; the English, Scottish, and Australian Bank, Limited; Bank of New South Wales; the Commercial Bank of Australia, Limited; Bank of

Adelaide, and the State Bank of South Australia, in Pirie Street, guaranteed by the State. Besides these, there is the Savings Bank of South Australia in King William Street.

Consulates. Austria Hungary, Lindes Lane, Rundle Street; Belgium, Grenfell Street; Brazil, Grenfell Street; Chili, King William Street; Denmark, Pirie Street; France, King William Street; Germany, Grenfell Street; Italy, King William Street; Japan, Pirie Street; Liberia, Grenfell Street; Netherlands, King William Street; Portugal, Grenfell Street; Spain, Gawler Place; Sweden and Norway, King William Street; Switzerland, King William Street; U. S. A., King William Street.

Churches. Adelaide has not inaptly been named the "City of Churches", and certainly the frequency with which places of worship occur in the streets cannot fail to impress the visitor. The Church of England Cathedral (St. Peter's) is situated in Pennington Terrace, North Adelaide, and is a Gothic structure of fine lines, embellished with many handsome memorial windows. The Roman Catholic Cathedral (St. Francis Xavier's) is in Wakefield Street, abutting on Victoria Square, and is really a magnificent building. Trinity Church (C. E.) on North Terrace was the first Church erected in the province and was at one time the pro-cathedral. Other Anglican Churches within the city are St. Luke's (Whetmore Square), St. Paul's (Flinders Street), St. John's (Halifax Street), besides two Mission Churches. St. Patrick's (R. C.) faces the West Park lands on West Terrace. There are three Presbyterian Churches, St. Andrew's (Wakefield Street), Flinders Street and Chalmers Church on North Terrace; five Wesleyan Churches, including the Draper Memorial Church built of stone in the early English style; three Congregational Churches, in Brougham Place (an edifice in the Venetian Ionic style), the Stow Memorial Church in Flinders Street and the third in Hindmarsh Square; four Baptist (the Flinders Street Church of this body is one of the finest architectural efforts in the city). The German Lutheran Church in Flinders Street is built of rubble stone in the Gothic style and has a tower 118 feet in height. Nearly every sect is represented by a church in Adelaide, and there are in addition to those already mentioned, two Churches of Christ, one Swedenborgian, a Friends' Meeting House, a Unitarian Church, a Jewish Synagogue and many others.

Hospitals and Charitable Institutions. The Adelaide Hospital is situated in a corner of the Botanic Gardens, facing North Terrace, in about 12 acres of ground. The

main building (there are several detached wards, etc.) is in the Italian style and there is accommodation for about 300 patients. Visiting days are Tuesdays, Thursdays and Sundays between 2 p. m. and 4 p. m. The Childrens' Hospital in Brougham Place (North Adelaide) is also a Training Home for nurses, and the visiting days and hours are the same as for the General Hospital. The Hospital is commodious and well arranged and the grounds are extensive. At the Semaphore is the St. Margaret's Convalescent Home worked in conjunction with the Hospitals. There are two Lunatic Asylums, one at North Terrace in the Botanic Gardens and the other at Parkside to the south east of the city proper. The Cottage Homes at Stanley Street and Kempton Terrace have been erected by public subscription for housing the aged and infirm poor and widows. They consist of two-roomed cottages, 36 in number, and there are others at St. Leonards, Brompton Park, Mitcham, Prospect, and Glenelg. At the Fullarton Estate is a Home for weak minded children and also a Home for Incurables. There is an Asylum for the Destitute on North Terrace to the West of the Mounted Police Barracks. The Anglicans, Roman Catholics and Salvation Army each have reformatories both for boys and girls, all of which are under State supervision. The Salvation Army also conducts Maternity Homes and there is a similar institution in connection with the Asylum for the Destitute under State control. The Industrial School maintained by the State is at Edwardstown. There are also numerous private hospitals.

Fire Brigade. The head station of the Metropolitan Fire Brigade is in Wakefield Street and subsidiary stations are situated at North Adelaide, Port Adelaide, the Semaphore, Norwood and Unley, all manned by permanent men. The plant at all stations comprises, 4 steam fire engines, 11 horse reels, 4 hand reels, 2 telescope ladders and 14,000 feet of hose.

Press. There are two morning daily papers in Adelaide: the "South Australian Register" and "The Advertiser". Each of these journals issues an evening paper, "The Evening Journal" (from the Register) and "The Express" (from the Advertiser), all of which are sold at 1d. each. The "Advertiser" office also issues a weekly, "The Chronicle" and the proprietors of "The Register" publish "The Adelaide Observer", both 4d. each. The large and increasing German section of the community are catered for by another weekly, the "Süd-Australische Zeitung", and there are several other periodicals devoted to humour, sport and the interests of various religious and temperance bodies.

PLACES OF INTEREST AND AMUSEMENT.

Theatres etc. The two principal theatres in Adelaide are the Theatre Royal in Hindley Street, which seats about 1,700 people, and the Tivoli (late the Bijou) in King William Street, seating about 1,000 people. The latter is mainly devoted to vaudeville entertainments. The Public Hall in the Town Hall is spacious and lofty, capable of accommodating 1,800 persons and containing the City Organ. It is much used for concerts, public balls and other entertainments. There are several other halls, such as the Oddfellows, used for similar functions.

Art Gallery. Mainly owing to private benefactions, art matters in Adelaide are flourishing. Money bequeathed by the late Sir Thomas Elder provided the means for the erection of a new Art Gallery in 1900, also a fund wherewith to make annual purchases of pictures. It has been decided to spend £250 every year in the purchase of works by Australian artists, and the South Australian Society of Arts holds exhibitions every year for selection purposes. There are some 360 pictures in the Art Gallery, 19 statues, and a number of other pieces of art. Among the most notable pictures are:— "Circe Invidiosa", by J. W. Waterhouse, A. R. A.; "The Descent from the Cross", J. V. Kramer.; "The Priestess of Delhi", John Collier; "The Favourites of Emperor Honorius", J. W. Waterhouse, A. R. A.; "Our River", W. L. Wyllie, A. R. A.; "Harrowing", H. H. La Thangur, A. R. A.; "Love and Death", G. F. Watts, R. A., and "A Nymph" by the same artist; "Evening", H. S. Bisling; "Virgin and Child", W. Bougereau, A. R. A.; "Noon", Tom Lloyd, R. W. S.; "Under the Craigs", W. Eyre Walker, R. W. S., and many others.

The Gallery is open to the public daily between the hours 10 a. m. and 4 p. m. (summer months 5 p. m.), and on Sundays afternoons from 2 to 4 p. m.

The South Australian Society of Arts was founded in 1858 and holds two exhibitions yearly, one about July for local works, the second in November for federated Australasian Art.

Sir Thomas Elder also endowed a Conservatorium of Music, and a building devoted to it has been recently erected on North Terrace. The School of Design and Technical Art, liberally subsidised by the Government, exhibits at the Exhibition building an interesting collection of technical art work in carving, repoussé, needlework etc. The art needlework branch produces excellent work, and the designs which are created and carried out by the students are not repeated, but become the property of the purchaser.

The Museum is located between the Public Library and Art Gallery, North Terrace, and is open daily from 10 a. m. to 5 p. m., (Sundays 2 p. m. to 5 p. m.). There is a very fine natural history collection here, special attention having been paid to the fauna of South Australia. But the most important feature of the Museum is the magnificent collection of native weapons, ornaments and utensils which is said to be the largest in existence.

The Technological Museum, in connection with the School of Mines and Industries on North Terrace, comprises a very interesting collection of exhibits, demonstrative of the products of the State. It is open to the public daily (except Sunday) from 9 a. m. to 5 p. m. (Saturdays and holidays to 4 p. m.). There is also a Technological Museum in connection with the Chamber of Manufactures located in the Exhibition building, North Terrace.

Museum of Botany. Within the Botanic Gardens is the Museum of Economic Botany, said to be very complete of its kind and well worth a visit.

Observatory. The Observatory situated on West Terrace, is equipped with all the necessary instruments and appliances for astronomical and meteorological observations. Visitors may obtain an order for admittance from the Government Astronomer.

Libraries. The Public Library, which contains about 50,000 volumes, is on the North Terrace, between Government House and the University. It is open from 10 a. m. to 9 p. m. on week days, and on Sundays from 2 to 6 p. m. In connection with it is the Public Reading Room, open from 9.30 a. m. to 9.30 p. m. (Sundays 2 to 6 p. m.). It contains an extensive range of papers, periodicals and magazines. There is also a good reference library and reading room in connection with the Y. M. C. A. institute in Gawler Street.

Affiliated with the Public Library are the Art Gallery and the Museum. The late Dr. Morgan Thomas recently bequeathed the sum of £ 65,000 to be divided among the three institutions.

Clubs etc. The Adelaide Club established in 1863 has its club house at No. 5 North Terrace, opposite Government House. Visitors, if introduced by a member are admitted as honorary members. The German Club, whose headquarters are at Selborne Hotel, Pine Street, was incorporated in 1854 and has a membership roll of 60. The South Australian Caledonian Society (4. Gay's Arcade, Adelaide) has for its object the fostering of the literature, music and sports of Scotland, and the affording of advice to Scottish immigrants. The members number nearly 300, and branches have been

established at several other towns. The Adelaide Liedertafel (National Hotel, Pirie Street) is the leading musical society and has a membership of 105 with 40 performing members. The Society gives three socials and one grand concert every year. The Adelaide Chess Club meets every Monday night at Kindermann's Café, Rundle Street. There is a Naval and Military Club on North Terrace, a Democratic Club in Pirie Street and a Literary Societies Union.

Scientific Associations, etc. The Royal Society of South Australia has its rooms in the Institute, North Terrace. With it are affiliated the Field Naturalists and the Malacological Sections. The objects are purely scientific and aim at recording facts new to science. The South Australian Branch of the Royal Geographical Society of South Australia has an office in the State Bank Chambers, Pirie Street. The South Australian Zoological and Acclimatisation Society, Frome Road, exercises a control over the Botanic Gardens, and the South Australian Horticultural and Floricultural Society promotes the sciences indicated in its title. The Royal Agricultural and Horticultural Society of South Australia has an office in Weymouth Street and holds its shows in the Exhibition building on North Terrace.

Parks, Gardens, etc. Adelaide is very rich in parks and gardens, the original designers of the town having provided for its circuit by a belt of park lands, averaging about half a mile in width, while North Adelaide, the principal residential area, is similarly surrounded. These parks generally speaking have been well laid out and planted with shade trees. This is particularly true of the North Park Lands through which flows the River Torrens. The stream, which originally was an insignificant water-course, has been dammed back by a weir and now forms a splendid sheet of water stretching for a distance of two miles, which affords ample opportunity for aquatic pursuits. The banks have been much improved, promenade walks formed, and whole reserve converted into a popular pleasure resort. A band stand has been erected and performances are frequently given there, and near by is a military parade ground, which has been reserved. The North Park Lands also contain the Adelaide Oval with an area of about 15 acres, much used for cricket, football and other athletics.

The Botanic Gardens were also originally a portion of the North Park Lands, and contain about 40 acres admirably laid out. There are several fernhouses of iron and glass, in which tropical plants are reared, while the walks are adorned with groups of statuary. A large

piece of land, called the Botanic Park, with an area of 84 acres, is contiguous to the Gardens, and extends to the banks of the Torrens. Shaded footpaths and a broad carriage drive traverse it in all directions. The Gardens are open to the public from sunrise to sunset on week days and from 9 a. m. to 5 p. m. on Sundays. In addition to these reserves the various squares in the city must not be forgotten, all of which are well cared for. The park lands surrounding North Adelaide are still more extensive, although perhaps not so well looked after as those immediately adjacent to the city. To the South of the city (6 miles by road and $11\frac{3}{4}$ by train) is the National Park, on the slopes of the Mount Lofty Range. It consists of a reserve some 2,000 acres in extent, set apart for the recreation of the people, and is managed by an influential commission. The Vice Regal summer residence, and an ably managed home for consumptives are in the vicinity.

The Zoological Gardens are situated in Frome Road, a few minutes' walk from North Terrace, upon a portion of the land known as the Botanic Park. The grounds, about 17 acres in area, have been artistically laid out with rockeries, lakes and fountains. The zoological exhibits include many wild animals of other countries, and a good collection of Australian fauna. There is a reptile house, in which are confined many species of indigenous snakes, and some crocodiles. The Government liberally subsidises the Garden, and the example is followed by private benefactors. On Saturdays, the Gardens are open free to the public, but on other days a charge of 6 d. for adults and 3 d. for children is made.

EXCURSIONS.

Although the neighbourhood of Adelaide, with the exception of the vine growing districts, cannot be said to offer any special attractions to the tourist, there are numerous short tours into the environments which will be found enjoyable; indeed no other Australian seaport city, with the exception of Sydney alone, affords so many pretty drives and opportunities for picnic parties in its immediate surroundings. The Mount Lofty Range to the east and south pushes its foot hills close into the city, and upon its slopes many excellent picnic spots are to be found, with extensive views over the surrounding country. Several suburbs of the city are pleasantly situated and within easy access by train, tram, or omnibus. The trams to Paradise, Magill, Burnside, Glen Osmond and Mitcham, run out to the foot of the hills, and from the termini roads

or tracks lead out into the higher ground in all directions. From Burnside, about 5 miles from Adelaide, Waterfall Gully can be reached after a walk of about 3 miles through charming scenery. The falls are also accessible from Glen Osmond (tram about every $1\frac{1}{4}$ hours), and on this route a fine panoramic view of the city is obtained.

Norton's Summit, 9 miles, may be reached from Magill (trams leave Adelaide 10 minutes past the hour) by a road winding round steep hills and under overhanging rocks. From the summit, where a comfortable inn will be found, a magnificent view opens out. Charges for vehicles to Norton's summit are: Buggy 15/—, Wagonette 25/—, Drag, seating 24 persons, 40/— for the day.

National Park, a popular resort, is reached by road (10 miles), or by rail to Belair (altitude 1,009, distance $13\frac{3}{4}$ miles, return fare 1st class $2\frac{2}{3}$, 2nd class $1\frac{1}{6}$). Charges for vehicles are similar to those to Norton's Summit. There is no hotel at National Park, and it is necessary to take a hamper with all requirements.

Mount Lofty. A picturesque drive is that to Mount Lofty (altitude 1,613 feet, distance $11\frac{1}{2}$ miles, train $19\frac{1}{2}$ miles, return fare 1st $3\frac{1}{3}$, 2nd $2\frac{1}{3}$), the highest railway station on the Mount Lofty Range, a favourite climatic resort and summer residence of wealthy citizens. Drive occupies $1\frac{1}{2}$ to 2 hours. Charge for vehicles, Buggy and two horses 20/—, Wagonette and two horses 30/— Drag with five horses 50/—.

„Balhanna“, (1,111 feet, $28\frac{1}{2}$ miles) on the same line, is the railway station for the Oakbank race course, where the famous Onkaparinga races are held on Easter Monday. Visitors who should happen to be in the State at that time should not fail to visit this, the biggest one-day race meeting in Australia. It is however advisable to have a vehicle for the occasion, as the train service on that day is generally unable to cope with the traffic. A party should also provide themselves with a lunch hamper, as inadequate provision is made for lunch on the ground.

Seaside Resorts. The seaside resorts of Adelaide are also much patronised. Glenelg, situated about $6\frac{1}{2}$ miles from Adelaide and connected by rail with the city, is a very popular resort and occupies the same position to the metropolis as Manly does to Sydney. It was at Glenelg that South Australia was proclaimed a British province in 1836, and the "old gum tree" under which the ceremony took place, is still preserved.

One of the prettiest seaside resorts near Adelaide is Brighton, on the shores of St. Vincent's Gulf, 10 miles south

of Adelaide. It is reached by rail to Glenelg and thence by tram. It has an esplanade, a jetty and a splendid beach.

At Hallett's Cove, about 16 miles from the city is to be found some interesting geological evidence of an ice age in Australia.

Semaphore, between Brighton and Largs Bay, is also an attractive and healthy resort.

The Vine Districts. The German settlements, which form a distinctive feature of South Australia, are all situated among the hills, at no great distance from Adelaide, and should certainly be visited by those who wish to gain a thorough knowledge of the different phases of Australian life. Tanunda has the additional interest of being the centre of the most famous wine producing districts in the State, and no one can fail to be impressed by the air of prosperity of Hahndorf, Lobethal, Blumberg and other villages. The German language still predominates in all these places, although for nearly half a century, when the first immigrants and parents of the present generation settled in the country there has been practically no fresh influx of immigration from the fatherland, and the children and grandchildren of the old settlers have become Australians to all intents and purposes.

To reach Tanunda take the 7.40 a.m. train to Gawler, arriving at 8.39 a.m. (return fare 1st 6/— 2nd 3/9). Coach (single fare 3/—) meets train, arriving at Tanunda (18 miles) in about 2½ hours. The road to Tanunda is an interesting one, offering many changing scenes of undulating country. Gawler itself, through which the coach goes, is a pretty little township. It has quaint avenues of eucalyptus trees, lopped off about 14 feet from the ground, a proceeding which has caused a thick cluster of new branches to grow, giving them an appearance not unlike that of European lime trees. Later on quaint little villages are passed, wearing, as does the whole landscape, a decided old-world aspect, and were it not for the unornamental iron roofs and an occasional gum tree, one could easily imagine oneself to be in some European country, an impression which is strengthened by the presence of a few old, grass thatched clay and log huts of the early settlers, standing among clumps of green foliage and blossoming fruit trees on the road side. Arrived at Tanunda (Sobel's Tanunda Hotel) a buggy may be engaged for 7/6 to 10/— for the afternoon, to visit the surrounding country.

Bethany is a picturesque little village about 1½ miles from Tanunda. A warm sulphur spring is on the hills about 2 miles distant from the village.

Seppeltsfield (about 4½ miles) is the chief vineyard in the district, and will be found an interesting place to visit.

VICTORIA.

When it is remembered that of all the Australian group, Victoria was the last to which the attention of enterprising colonists was turned, that, before a furrow was ploughed in the Port Phillip district, all the other States had made some progress in settlement, her position to-day, second to New South Wales only in some respects, and not even subordinate to the Mother State in others, cannot be regarded otherwise as remarkable. It was not until 1835 that the Tasmanians Faulkner and Batman began the exploitation of the land about the Yarra, and realised the possibilities in the district which more than 30 years previously had been abandoned as unsuitable by Lieutenant Colonel Collins. The excellence of these prospects, agricultural and pastoral, attracted the boldest spirits who travelled there from Sydney-side as well as from Tasmania, with the inevitable result that before very long, the new settlement began to rebel against the dominance of New South Wales. In the old Legislative Council of New South Wales, the Port Phillip members were long a thorn in the side of the old conservatives, and for ten years from 1841, an agitation for separation was ceaselessly pursued. The agitators achieved their object by 1851, but perhaps if they had known what manner of problems would beset them in their earliest years of responsible government they would have paused awhile. For the year 1851 was a climax in more ways than one. In it not only did Victoria first begin to "find her feet" in the conduct of her own affairs but she also leapt into fame as a wonderfully rich gold producer. The discoveries of gold which followed each other in quick succession through the early fifties, drew, as draws a magnet, all sorts and conditions of men from every quarter of the globe, and the new colony found herself required to provide for and to regulate a population which in a few short months had swelled to many times its total of 1851. Through the land went the hardy diggers seeking the treasure of the soil, and revolutionising the conditions of the whole country. Melbourne was deserted, houses lay empty in the streets, ships untended in the harbour. Every scholar or sailor, clerk or carter, barrister or bricklayer had abandoned his work for the privations, the hardships and the excitement of gold mining. And in addition from oversea there came another multitude to swell the spoil — from California where the diggings there

were then new, from the other States, from Great Britain, in fact from every point where the Anglo-Saxon race had penetrated and had left its representatives. They all flocked to the new Ophir, and Ballarat, Bendigo and the rest of the fields sprang into being with marvellous rapidity, thronged with hurrying miners, and growing in a few short years, from fortuitous assemblages of canvas huts to the dignity of cities with thriving populations, dependent in a greater or less degree upon "the fields". With such a community as filled Victoria in the fifties it is not a matter for surprise that, when the fever had been assuaged and the men had returned to their avocations once more, the general progress of the colony, both politically and socially, should be somewhat more stirring than was the case with the other colonies. Beginning with the Ballarat riots of 1854, when the republic of Victoria was proclaimed in the Eureka stockade, the new democracy asserted itself at intervals all through the early years of responsible government. Victoria was the first to adopt the highly democratic principles of vote by ballot and manhood suffrage, and, in the House or out of it, the trend of development was certainly on lines that favoured the masses rather than the classes. Later on when the enthusiasm had died down, when the golden days had given place to less exciting times of agricultural development, Victoria certainly dropped into a more conservative groove. But into that development of agriculture and also into the manufacturing industry, her people threw the same energy as they had done in former times when dreams of new and sudden riches held them, and as a consequence the colony forged ahead in these two sections of a nation's wealth and substituted them as money producers for the quicker, if more precarious returns, to be had from mining.

AREA AND BOUNDARIES.

Next to Tasmania, Victoria is the smallest of the Commonwealth States, having an area of only 87,884 square miles or 56,245,760 acres. From east to west the greatest length line in the State measures 420 miles, and the greatest width from north to south is 250 miles. Geographically, Victoria lies at the south-eastern extremity of the continent between 34° and 39° south latitude and 150° and 141° east longitude. On the east and south it is washed by the shores of the Pacific Ocean and Bass Strait (dividing it from Tasmania) respectively, the coast line being about 600 miles long, and on the west the 141st meridian divides it from South Australia, although an error in survey really places the boundary

line $1\frac{1}{2}$ miles further to the west than that meridian. To the north the course of the Murray separates it from New South Wales, from the intersection of that river with the 141st meridian to the source of the river Indi, thence in a straight line to the coast at Cape Howe.

CONFIGURATION.

In comparison with the other States of the Commonwealth Victoria may be considered rather more mountainous. Just to the northward of the boundary, the axis of the whole mountain system of Eastern Australia is situated, culminating in Mount Kosciusko and Mount Townsend, and southward from the range in which these peaks are, the great chain of the Australian Alps spreads out in a succession of ranges covering the whole of Eastern Victoria. This series of mountain ranges run generally from north-east to south-west, becoming more westerly in direction as they recede further from the coast. The province of Gippsland is practically all highlands, and some of the finest scenery in Australia is to be found there. The ranges rise in places to a height exceeding 6,000 feet. An extension of the Dividing Range takes a true westerly direction right through the State as far as its south-western corner and forms the watershed dividing the river systems into two, the streams of the one flowing north to the Murray, and of the other south to Bass Strait. On the eastern side the principal stream is the Snowy River, flowing southerly from New South Wales, and others embouching into the Pacific Ocean are the Tambo, the Mitchell, and the Latrobe. All these streams, in the upper part of their course at any rate, partake of the mountain torrent nature, and are not navigable very far from their mouth. Into Bass Strait, or the indentations opening to Bass Strait, flow the Yarra, the Barwon, the Hopkins, the Glenelg and several smaller streams. But the main system is that formed by the tributaries of the Murray, all of which take a northerly direction and include the Mitta Mitta, the Ovens, the Goulburn, the Loddon and several others. This system waters an extensive area of rich agricultural and pastoral land, and their valleys are settled practically for their entire length. In short Victoria is well watered, and in addition there are numerous lakes both of fresh and salt water. In the latter division are placed the Gippsland Lakes, formed by a long narrow strip of land on the inland side of which are located a string of salt water lagoons, some of them being of navigable depth. To the north-west, Victoria slopes gradually into plain land,

with characteristics similar to the western descents of New South Wales, and the famous Mallee country is situated in this part of the State. The land, generally speaking, is fairly good for pastoral and agricultural purposes and the Government have offered special inducements for its settlement.

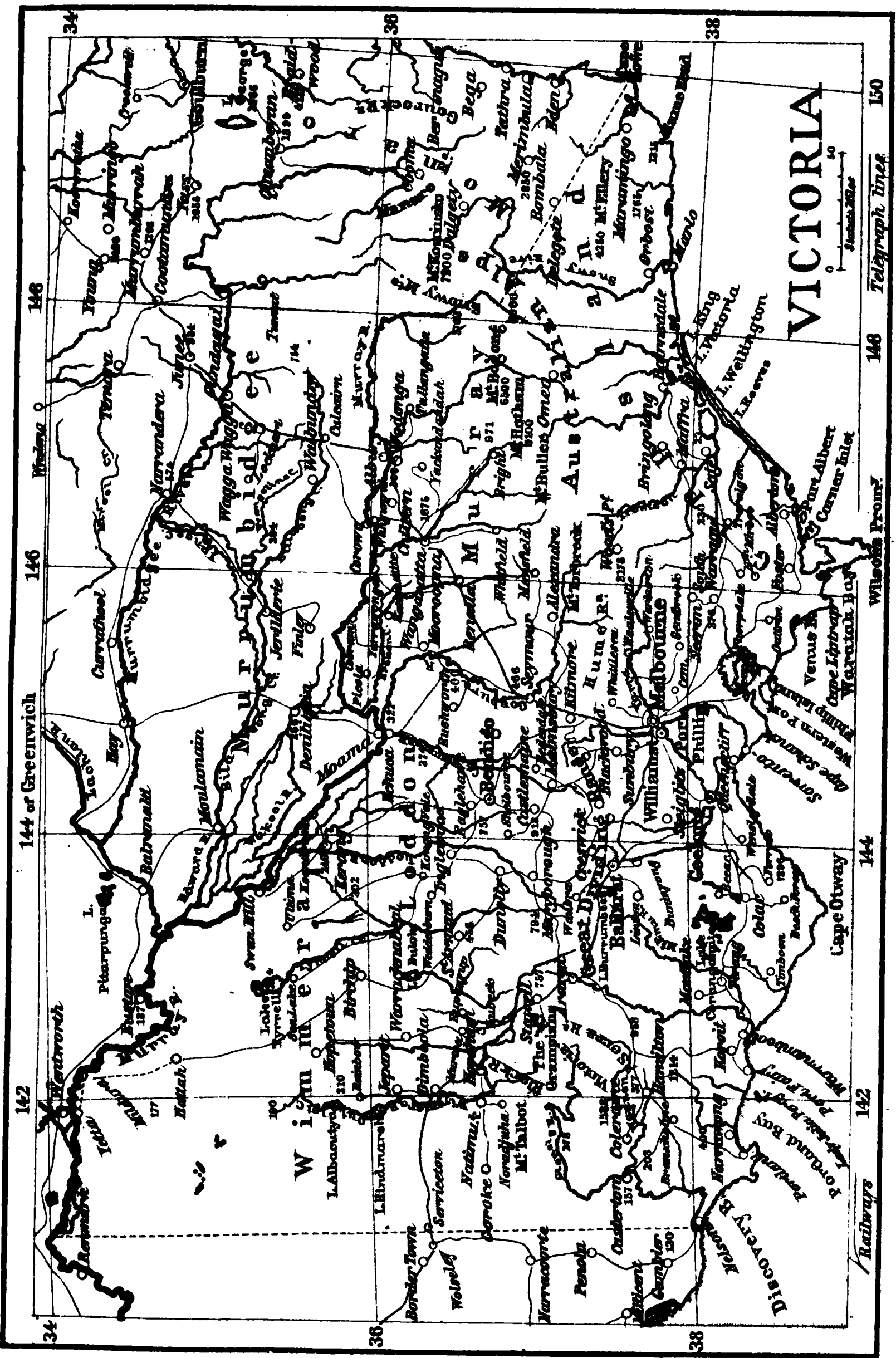
CLIMATE.

On the whole, the climate of Victoria bears more similarity to that of European countries than that of any other State on the mainland. Down in the south-eastern corner of the continent with two of its sides washed by the ocean, the State is fortunate in having a more equable climate on the average than that of its sisters, and as it is the smallest in area, it has no back country with continental characteristics to raise its yearly temperature as is the case with the other four. In its general characteristics however, it does not differ very greatly from that of the Southern coastal districts of New South Wales, as far north as the latitude of Sydney. Occasionally a northerly wind or "brickfielder" as it is called colloquially, blowing across from the sun scorched plains of the interior raises the temperature during the summer months to a figure sometimes considerably in excess of 100°. But these heat waves are of short duration and the temperature of Melbourne rarely rises above 85°, Bendigo, a hundred miles further north, having a slightly higher degree. On the eastern side the highlands of Gippsland ensure a fairly temperate climate, and in winter snowfalls are by no means uncommon in that region. To the west and northwest the climate is not so bearable, and the plainlands there are subject to almost the same conditions as the western districts of New South Wales. Indeed, on January 6, 1906 the temperature at Mildura reached the unprecedented reading of 124 deg. F., which was five degrees in excess of the highest temperature registered on the same date in the sister State.

The rainfall in Victoria, though less in volume than that of New South Wales or Queensland, is more equally distributed throughout the year, and except perhaps in the northwest, droughts, as the term is understood, are practically unknown. At Melbourne the mean average rainfall is 25.28 inches.

POPULATION AND VITAL STATISTICS.

On the 30th June 1904 the population of Victoria, exclusive of aliens and aborigines, was estimated at 1,206,098 individuals. The estimate on the 31st Dec. 1901 was 1,208,710,



VICTORIA



Railways		Telegraph lines	
142	144	148	150
Wilson's Prom.		Telegraph lines	
142		150	

Wilh. Jöntzen, Bremen.

so that in the course of two years and a half Victoria lost over 2,000 of her population. The chief cause to which this was attributable, was the active emigration from the State to South Africa consequent upon the declaration of peace there, and the removals of restrictions upon immigration to that colony. The aggregation of population in the vicinity of the large towns is as noticeable in Victoria as in the other Australian States, and in her case particularly is accentuated by the growth of the manufacturing industry on lines which necessitate the employment of an urban artisan class. At the end of 1901, 41.13 per cent of Victoria's population was centralised in Melbourne.

According to the latest census returns (March 31st, 1901) the population of Victoria, numbering on that date 1,201,070 (Males 603,720, Females 597,350) were distributed in respect to birthplaces as follows:—

Natives of Victoria	875,645
Other Australian States	65,184
New Zealand	9,022
United Kingdom	214,365
Other British Possessions ..	4,484
German Empire	7,615
Chinese Empire	6,230
All other Foreign Countries	11,807
Born at Sea	1,561
Unspecified	5,157
Total...	<u>1,201,070</u>

This table, though it serves as an interesting comparison, does not of course determine the nationality of the inhabitants of the State, as many of the natives of Victoria and other Australasian States are the children of parents whose country of origin is Germany or some other foreign land, who have immigrated to the State and settled there.

The total number of deaths in Victoria during the year 1901 amounted to 15,904, giving a death rate per thousand of 13.22, which rate was higher than that of any other State in the Commonwealth except Western Australia; but at the same time it must be mentioned that the death rate of Victoria in common with the other States is much below that of any European country, and is moreover declining from year to year as sanitation and hygiene are more closely studied in the large centres of population. The birth rate, following the rule that a falling death rate is accompanied by a falling birth rate, is also declining, but in 1901 it was still as high as 25.77 per thousand, while in the quinquennial

period 1861—65 it was no less than 43.30 per thousand. The causes of death may be tabulated thus for the year 1900 (no later figures being available):—

Specific febrile or zymotic diseases	1,343
Parasitic diseases	41
Dietetic diseases	93
Constitutional diseases	2,829
Developmental diseases	1,493
Local diseases	7,771
Violence	990
Ill defined	655
	<hr/>
	15,215

The division entitled constitutional diseases includes phthisis and cancer, the former of which is still one of the principal causes of death in the State, but its rate, though higher than that of any other Australian State, is lower than that of England or of any European country.

CONSTITUTION.

Recently Victoria has come to the front rather noticeably in the matter of constitutional reform, and the last Parliament, elected on the people's wish that such reform should be effected, have passed an amending act which materially altered the law. Broadly speaking the method of Government is the same as that which obtains in all the other Australian States. Royalty is represented by a Governor appointed by the Home Authorities, and the people by a bicameral legislature. The Legislative Council or Upper House, is elected by the people voting in divisions of 14 provinces, on a property qualification. Members' qualification is also a property one, and their term of office is for 6 years. Members must be over 30 years of age and possess freehold rateable property to a certain value. For the Lower House, manhood suffrage is the basis upon which electors vote. Members must be over 21 years of age and natural born or naturalised British subjects. The new Constitution Act provides for special representation for Civil Servants, who are given 2 members in a House of 58.

EDUCATION.

The system of primary instruction by the State was adopted by Victoria under an Act passed in 1872. Education is compulsory, secular and free in the State, and in the

large towns especially the compulsory clause is very strictly enforced, an amendment to the Act passed in 1901 further strengthening the powers of the Department of Public Instruction and its Ministerial head in this respect. Children within the ages of 6 and 13 must attend now on an average of 75 per cent of the days in each quarter. No fee is chargeable for an ordinary sound English education, but State school teachers are allowed to give lessons in extra subjects for which a moderate fee is payable. State school teachers are forbidden to impart religious instruction, and no lessons of this nature are allowed in school hours. During the last decade, a retrenchment policy has effected an amalgamation of schools in large centres of population, the smaller institutions being closed and the scholars transferred. At the same time evidence that educational facilities in the State are well distributed is available in the increased proportion of average attendance. Secondary education in Victoria is, apart from the extra subjects taught in State schools, entrusted to private and denominational institutions to which the Government grants scholarships from the State schools, and these scholarships are supplemented by those offered by the various secondary schools themselves. From the secondary schools the pupil may qualify for the Melbourne University, which takes high rank among similar institutions throughout the world. To the University are attached three affiliated colleges, and women are admitted to the same privileges as are accorded to male students. In the technical branch of education Victoria has been fortunate enough to enlist the practical sympathy of private individuals, by means of whose endowments, supplemented by liberal grants from the State, an excellent training may be obtained by any one desirous of doing so, more especially in the case of the profession of mining, engineering, etc. Public Libraries and Schools of Art have been established in all the towns, and the diffusion of education throughout the State has been general and most gratifying.

At the end of 1903, the number of primary schools open in the State was 2,094, with a total of pupil enrolment of 207,040 and an average attendance of 149,841. The expenditure by the State on primary education for the year ending 30th June 1903 was £ 678,698. At the end of the same year there were 798 private schools in Victoria, most of which were engaged in a secondary education, with an enrolment of 45,650 and a teaching staff of 2,369. A sum of £ 13,500 was granted for University education for 1903 during which year the number of students attending lectures at the Melbourne University was 628.

RELIGION.

All religions are equal in Victoria, and State aid to denominations, as in the case of the other States, has not been granted since 1875 when the State withdrew its support by Legislative enactments. The Church of England is numerically the strongest, its adherents forming, according to the census of 1901, 35.8 per cent of the population. The percentage of the Roman Catholics was 22.3, of Presbyterians 16.2, of Wesleyan Methodists 15.2, of Congregationalists 1.5, of Baptists 2.8, of Jews 0.5, and of all others 5.7. There are five Church of England dioceses in Victoria — Melbourne, Ballarat, Bendigo, Wangaratta, and Gippsland, the last three named having been constituted in 1902. In the diocese of Melbourne there are 57 parishes, 36 parochial districts, and 11 reader's districts. The clergymen number 131, the churches 189, and the average Sunday attendance 35,953. The figures for the other dioceses may be summarised as follows:— Ballarat, 73 parishes, 68 clergymen, 164 churches, 13,887 Sunday attendance; Bendigo, 23 parishes, 72 churches, 25 clergymen, 7,066 attendance; Wangaratta, 35 parishes, 27 clergymen, 74 churches, 7,370 attendance; Gippsland, 27 parishes, 23 clergymen, 62 churches, 5,490, attendance. The Roman Catholic faith is represented by an archdiocese of Melbourne and dioceses at Ballarat, Sandhurst, and Sale, with a total of 48 regular clergy and many secular priests, lay brothers, religious brothers and so on. The Presbyterian Church of Victoria has 205 ministers and 76,877 adherents attending services. The Methodists' figures are 268 ministers and 165,800 attendance. The Baptists have 32 ministers and 66 churches. Other denominations of more less strength in the State are: The Free Presbyterians, the Church of Christ, the Congregationalists, Particular Baptists, Unitarians, Hebrew, Scandinavian, Evangelical Lutherans, Australian Church, Society of Friends, and the Salvation Army.

FINANCE.

The financial year in Victoria as in New South Wales ends on the 30th June, and the revenue for the 1903—4 period amounted to £ 7,313,591, the items being:— Taxation, £ 760,929; Land Revenue, £ 384,708; Railways and Tramways, £ 3,400,243; Surplus Commonwealth Revenue returned (chiefly from Customs and Excise duties), £ 2,002,804; all other sources, £ 764,907. The expenditure for the same period amounted to £ 6,914,993, distributed as follows: Working

Expenses of Railways and Tramways, £1,894,553; Public Instruction, £657,565; Interest and Charges on Public Debt, £2,159,050; all other services, £2,203,825.

Altogether there are eleven banks of issue operating in Victoria at the present time. Of these five (the Bank of Victoria, the Colonial Bank of Australasia, the Commercial Bank of Australia, the National Bank of Australasia, and the Royal Bank of Australia) have their head office in Melbourne, and the place of chief control for the remainder is situated elsewhere. For the June quarter of 1904 the liabilities of these eleven banks aggregated £32,267,119 and the total assets were £38,119,757. The bank clearings in Victoria for 1903 amounted to £166,693,000. With these banks of issue must be included the operations of the Savings Banks, in which, during the financial year 1903-4 there were 432,867 depositors, with a total amount of £10,582,808 to their credit; an average of £24.9.0 per depositor, or £8.15.5 per head of population.

During 1903 there were 699 bankruptcies aggregating a total deficiency of £163,469.

COMMERCE AND SHIPPING.

The imports into Victoria are not so heavy in proportion to population as they are in some of the other Australian States, owing mainly to the fact that the manufacturing industry has there been more developed than it has elsewhere. Thus in 1903 the imports per head were valued at £14.15.0 as against £18.16.4 for New South Wales, £18.5.11 in South Australia and £30.14.9 in Western Australia. Previous to the imposition of the Federal tariff, Victorian duties were of a highly protective nature and this militated somewhat against the introduction of the foreign article, while at the same time it allowed the Victorian factories to find a market for their products at a profitable return. The principal imports may be set down as wool (mainly for re-export), Gold, Live Stock, Cotton, Silk, Woollen and other textile fabrics, Sugar and Molasses, Tea, and other articles of food and drink, Narcotics (tobacco, etc.), and Stimulants (wines and spirits). For 1903 the total value of imports was £17,859,171.

The principal articles of export are:— Pastoral, Agricultural and Dairy Produce, such as Wool, Frozen and Preserved Meats, Live Stock, Tallow, Hides, Wheat, Oats, Hay, Fresh and Preserved Fruits, Butter, Bacon and Ham, etc., the total export for the year under review being £19,707,070. The Victorian Government have of late years been making special efforts in the direction of controlling and elevating

the exports of domestic produce, and an excellent system of grading, packing and preparation has now been established.

The Shipping of Victoria differs very little in its characteristics from that of New South Wales. The principal ports are Melbourne and Geelong, and to these two places the bulk of the oversea shipping goes. In 1904 a total of 2,495 vessels with an aggregate tonnage of 3,928,849 were entered inwards, and 2,503 vessels of 3,906,692 tons were entered outwards. Excellent harbour facilities are to be found at Melbourne, the wharves, docks, etc. being under the control of the Melbourne Harbour Trust, a body which has effected vast improvements upon the river Yarra and the foreshores of Port Phillip.

MINING.

Gold mining has, of course, since the fifties been the mainstay of Victoria's mineral production, and to the present day she is far ahead of all the other States in the matter of gold production, though of late years West Australia and Queensland in one or two cases has surpassed her in the matter of annual output. Indeed gold mining was really the source of Victoria's greatness, and the richness of the discoveries, which were successively made, set her at the head of the Australian States, a position which has only been regained by New South Wales within comparatively recent times. Up to the end of 1903, gold to the value of £266,810,712 had been raised in Victoria, representing 54·00 per cent of the total raised in the Commonwealth. For 1903, the yield was 767,351 oz. of fine gold, valued at £3,259,483. The principal centres of gold production are the Bendigo district, where deep level mining is carried on with marked success, some of the deepest gold mines in the world being found on the field (the Victorian Mine has a depth of 3,750 feet), the Ballarat district, also a most interesting locality, and the Beechworth district. Quartz mining has steadily advanced, but alluvial digging is still extensively followed, and in 1901 the numbers of men engaged were respectively 14,891 and 12,886, while 919 men were employed in gold dredging. Victoria has the distinction of having produced some of the largest nuggets ever found in Australia, including the "Welcome Stranger", weighing 190 lbs., the "Welcome" weighing 184 lbs. 9 oz. and many others of lesser weight.

Besides gold, other metals and minerals of commercial importance are:—Copper, which is found extensively in

WYPERING BAY, LAKE TYERS, VICTORIA.

the Beechworth district though it is not worked; Tin, in the Gippsland districts; Coal, the principal collieries being the Outtrim, Howitt, Jumbunna and the Coal Creek Proprietary; Lead; Diamonds, Turquoises and other gemstones. But the production in all these metals and minerals, with the exception of coal, are at present in a stagnant condition, and though the deposits of tin and copper are known to be comparatively extensive, little effort has been made towards their systematic working. The total value of Victoria's mineral output for the year 1903 was £ 3,381,520, drawn from the following Sources:— Gold, £ 3,259,483; Coal, £ 40,818; Silver and Silver-Lead, £ 2,880; Tin, £ 2,165; Copper, £ 500; Other Minerals, £ 75,674.

AGRICULTURE.

The restricted area — comparatively speaking — of Victoria has precluded any extensive development of the pastoral industry, and the State has had perforce to turn her attention to something that proportionately returns more for less land. After her career as the miner, she became the agriculturist of the group, and the tendency which years ago earned it the good-humoured if somewhat contemptuous soubriquet of the "cabbage garden" has placed it now at the head of Australian States in the matter of cultivation. Other States such as Queensland and Tasmania certainly exceed Victoria's average value of produce per acre, but this is due to the cane growing of the former and the gardens and orchards of the latter. As regards the gross value of the crops however, Victoria stands first, the total value of all crops raised in the State being nearly a third of that of all Australia. Victoria is practically the only State that has gone in for extensive agriculture, and that to no extraordinary degree, and the potential productiveness of the agricultural land is still very considerable. The principal crops grown are Wheat, Oats, Barley, Hay, Potatoes and other vegetables, while wine making is also responsible for a very fair proportion of the agricultural income. Returns are usually made up to the 31st of March in every year and on that date in 1903 Victoria had a total of 3,389,069 acres under cultivation, excluding the figures for land sown with artificial grasses. With these figures added the total would be increased to over 4,000,000 acres, which is in excess of any other State, even though most of them have a far larger area available for agricultural purposes. The area is divided under the principal crops as

follows:— Wheat 1,561,111 acres; Oats, 433,638 acres; Barley, 47,760 acres; Maize, 11,810 acres; Potatoes, 48,930 acres; Hay, 733,353 acres; Vines, 28,513 acres; Orchards, 50,357 acres. In normal seasons Victoria produces sufficient wheat for all requirements and has in addition a substantial surplus for export, but the 1901 harvest was a partial failure owing mainly to drought or other unseasonable weather conditions, and the yield was below the average for the last ten years. Altogether 12,127,382 bushels were produced, the value of which was £ 2,071,800. The 1902 harvest proved to be a still greater failure, but the year 1903 produced a record crop of 28,525,579 bushels. The cultivation of oats is next in importance to that of wheat in Victoria, and the acreage for 1903 yielded 13,434,952 bushels, a total far in excess of any other Australian State. Maize is not extensively grown in Victoria, and the 11,810 acres under it yielded 904,239 bushels in the same year. The yield per acre was of a high average value owing to the fact that the area under the crop is specially selected and consequently gives a larger return. In Barley also Victoria has a larger acreage and a much larger production than any other State, the latter amounting for the 1903 harvest to 1,218,003 bushels, out of a total of 2,656,313 bushels raised in the six States. Potatoes have reached an exportable level in Victoria, which has again the largest acreage of the States under this crop, but of late the surplus has decreased. Of Hay in 1903, 1,233,063 tons were produced. The area under grape vines (28,513 acres) is also in excess of any other State, not even excepting South Australia, and Victorian Wines have succeeded in attracting a market in Great Britain and Europe where they are in demand both for plain consumption and for blending purposes. In 1903, 2,551,150 gallons of wine were produced, the greatest quantity yet manufactured by any Australian State. Among other grape products for that year were 13,063 cwt. of raisins and currants.

The cultivation of the sugar beet has attracted a considerable amount of attention in Victoria and, assisted by a bonus from the Government, a factory for the manufacture of beet sugar was erected, but after three years' operations it was closed down in 1900 due to both insufficient supply and want of expert knowledge. Climate and soil both are favourable to the cultivation of the sugar beet and there is still hope that the industry may be established under more auspicious conditions. Though circumstances are favourable to the extension of fruit orchards and gardens, Victoria has not yet been able to satisfy local requirements in fruit, and

has, like the other States, to rely on importation. The Government are especially willing to help growers in this direction, and by means of bonuses for the trees planted and facilities offered for disposal of crops, are endeavouring to induce increased attention to the fruit industry. An export trade with England has been set up, and several shipments of apples and pears realised high prices in the London market. The Government of Victoria has taken steps towards the dissemination of agricultural knowledge and has established colleges for that purpose at Dockie, Longerewong and Sutherglen. Experimental farms are attached to the first two, and there is a viticultural college at Sutherglen. The Commissioners of the Savings Bank are empowered to lend money to persons employed in agricultural, viticultural or horticultural pursuits on security of the land held by them. Recently also efforts have been made towards the institution of irrigation works in various parts of the State, and though it is yet too early to form definite conclusions regarding the efficacy of the measures taken, a promising start has been made.

PASTORAL.

Victoria can scarcely be called a pastoral State, her progress in this direction having been inconsiderable for a number of years. There have never been so many as two million cattle or fourteen million sheep within her borders, and the figures for 1903 (cattle were estimated at 1,522,265, sheep at 8,774,731) are in the case of cattle very little in excess of those for 1881, while the number of sheep shows a decrease of a million and a half. Of course there is not the area available for pastoral pursuits that there is in the other States, but, even now, in the case of sheep at any rate, the limit of her carrying capacity has not by any means been reached. At the same time it must be remembered that the agricultural industry is yearly absorbing more land and it is doubtful whether the present position will ever show material or at any rate permanent improvement. The total value of pastoral products in the State for 1903 was set down at £ 4,409,674. In 1901, 74,879,300 lbs. of wool were produced in Victoria, the wool from the State securing high prices in Australian and oversea markets. The production fell off in 1902, and the export figures declined in sympathy, dropping from 387,921 bales in 1901 to 303,110 bales in 1902, the respective values being £ 4,351,085, and £ 3,473,372. In 1903 a further decrease was experienced,

the production for the year having dropped to 54,608,582 lbs. A very fair proportion of the exports from Victoria consist really of the re-exportations of wool imported from other States, but taking that fact into consideration, the actual value of excess of export over imports in that year amounted to £ 1,804,407. The meat export trade is certainly of commercial importance in Victoria, though the figures fall far below those of New South Wales and Queensland. The total quantities exported in 1903 were: Frozen Beef, 14,125 cwt.; Frozen Mutton, 117,427 cwt.; Preserved Meat, 2,976,513 lbs.

DAIRYING.

Victoria takes the lead in dairy farming and its products among the Australian States, and for some years now Victorian Butter and Cheese has been quoted on the London market in competition with the brands from Denmark, Canada and other countries. The Government have erected cold storage works near Melbourne, and have also appointed inspectors, so that no inferior stuff shall be exported, and so tend to lower the reputation of the article in the eyes of foreign buyers. There were in 1903 about 516,000 dairy cattle in Victoria, and the estimated quantity of milk produced was 142,431,000 gallons. From this quantity 46,686,000 lbs. of butter and 5,682,000 lbs. of cheese were produced, sufficient to supply local requirements and to leave an exportable surplus of 30,166,646 lbs. of butter and 1,634,847 lbs. of cheese. That the industry is making rapid strides may be judged from the fact that to the end of 1902 the total quantity of butter exported only amounted to 17,184,837 lbs., and of cheese to 898,068 lbs. Pig raising is generally practised in conjunction with dairying, and Victorian bacon and hams have for some years reached the exporting point, produce of that nature to the value of £ 134,940 being despatched during 1903.

While on the subject of butter and cheese export it may be as well to refer to the export of other perishable products, a branch of trade which Victorian producers, aided by a sympathetic government, have made peculiarly their own. The Government have erected extensive cold storage works where all manner of perishable products may be lodged until shipped, and have organised an effective system of supervision. Poultry, Hares and Rabbits, Eggs, Butter, Cheese, etc., are all stored there, prior to removal for local consumption or export, and the stores generally fill a long felt want.

MANUFACTURES.

It was Victoria which first displayed activity in the manufacturing industry, and the lead she then took she has maintained up to the present. Her factories now cover a wide field, dealing not only with domestic industries for the treatment of perishable produce for immediate use or those dependent upon the natural resources of the country, but also with industries the production from which comes into competition with imported goods. Until the imposition of a uniform Federal tariff Victorian duties were highly protective in nature, and foreign goods were therefore kept out of the market to a great extent, while at the same time, the local producer was enabled to gain a footing and establish his particular industry upon a profitable basis. Up to 1901 interesting comparisons could be instituted between New South Wales and Victoria, the one freetrade the other protectionist, in the matter of the manufacturing industry, and many politicians drew arguments pro and con the two fiscal policies. Whatever be the true policy, the fact remains that Victoria consistently maintained her position and enlarged her sphere of operations to take in and develop branches of manufacturing which New South Wales found unprofitable to work, although on the other hand it was claimed by free traders that the "coddling" of manufacturing was not calculated to bring strength to it. In 1903 a total of 4,151 factories were at work in Victoria, employing altogether 73,229 hands. According to Coghlan's statistics, 35,194 of the total number of persons employed are occupied in industries competing with imported goods, 34,502 in the treatment of primary products, and 3,533 in the manufacture of domestic perishable produce.

SPORTING.

Horse Racing:— Victorians favour no branch of sport in particular, and the pastimes which prevail all over Australia are followed there, though in some cases, such as football, a departure from British precedence has been made. In horse-racing perhaps Victoria takes the lead in the Commonwealth and the Victorian Racing Club is undoubtedly in the premier position among similar bodies. Its headquarters — Flemington, is the best equipped and the finest course in Australia, where is yearly decided the Melbourne Cup — a race which is famous throughout the world, and which throughout Australia creates an extraordinary degree of

excitement for weeks before it is run. The leading race clubs together with their headquarters and the principal events run under their auspices are as follow:—

The Victorian Racing Club, 493 Bourke Street W., Flemington Course:— Victoria Derby ($1\frac{1}{2}$ mile), Oaks Stakes ($1\frac{1}{2}$ mile), Melbourne Cup (2 miles), Maribyrnong Plate (5 furlongs), Ascot Vale Stakes ($\frac{3}{4}$ mile), V. R. C. St. Leger (1 mile, 6 fur.), Newmarket Handicap ($\frac{3}{4}$ mile), Champion Stakes (3 miles), Australian Cup ($2\frac{1}{4}$ miles).

Victorian Amateur Turf Club, 491 Bourke Street. Race-course Caulfield, $6\frac{1}{2}$ miles from Melbourne:— Caulfield Guineas (1 mile), Caulfield Cup ($1\frac{1}{2}$ miles), Caulfield Grand National Steeplechase (4 miles).

Geelong Racing Club:— Geelong Cup ($1\frac{1}{4}$ mile).

Moonee Valley Racing Club, 42 $\frac{1}{2}$ Bourke Street. Course at Moonee Valley:— Moonee Valley Cup (7 furlongs).

Williamstown Racing Club, Kirk's Bazaar Melbourne. Course at Williamstown:— Williamstown Cup (1 mile, 3 fur.).

Epsom Racing Club, 404 Bourke Street. Course at Mordialloc, 16 miles from Melbourne.

Richmond Racing Club, 8 Victoria Buildings, Swanston Street. Course at Bridge Road, Richmond.

Sandown Park Racing Club, 491 Bourke Street, W. Course at Spring Vale, 15 miles from Melbourne.

Cricket:— The controlling body is the Victorian Cricket Association with offices at the Mechanics' Institute, South Melbourne, and club rooms at Young and Jackson's, Swanston Street. The Council arranges interstate matches and the competitions among the ten affiliated clubs, but the Melbourne Cricket Club is the wealthiest organisation and the one which possesses the most influence. Founded in 1838, it has now some 3,500 members, and has on many occasions brought out teams of English cricketers for the purpose of playing matches in Australia. Cricket matches are played now and again with each of the other States of Australia.

Football:— The majority of clubs in Victoria play the Australian game of football, the rules and methods of which are quite distinct from those of Rugby and the British Association. It is claimed by its adherents that the game is more attractive and more scientific than either of the other two, and during the season a very great deal of public interest is taken in the matches of the senior teams. The offices of the Victorian Football League are at the Port Phillip Club Hotel, Flinders Street.

FLEMINGTON RACECOURSE, MELBOURNE
"CUP DAY CROWD".

A
Rowin
and
affilia
high.
Victo
T
club
The
yacht
are la
S
inters
baths
of Po
(
Victo
Fishi
thoug
comp
can
in th

equi
Aus
of t
trav
dire
the
Sou
tha
enc
unr
Z
ger
the
Vi
th
co
5
c
f

Aquatics:— There are 260 members in the Victorian Rowing Association which has its headquarters at Young and Jackson's Hotel in Swanston Street. Ten clubs are affiliated, and the standard of the sport in Victoria is very high. Interstate eight oar races are rowed every year, the Victorian crew being usually victorious.

The Royal Yacht Club of Victoria is the premier sailing club of the State and has been in existence since 1856. The open waters of Port Phillip offer great advantages for yacht and boat sailing which, it is perhaps needless to say, are largely availed of.

Swimming is also a favourite sport in Victoria and interstate contests are at times arranged. Many good public baths have been established in Melbourne and on the shores of Port Phillip.

Other sports and pastimes extensively patronised in Victoria are Lawn Tennis, Bowls, Cycling, Shooting and Fishing. The two latter provide plenty of enjoyment, and though the settled condition of the country necessitates comparatively long journeys in pursuit of game, good sport can be obtained within the State boundaries, more especially in the Gippsland districts.

RAILWAYS.

In comparison with its area, Victoria is far better equipped with railway lines than any other State of the Australian Commonwealth, and a glance at a railway map of the State will show that in parts a network of lines traverses the more thickly populated localities in every direction. The proportion of mileage to area is 1 in 26, the nearest ratios to this being Tasmania's 1 in 42 and New South Wales' 1 in 93. In some cases it must be confessed that certain lines laid down in the past under political influence have never been remunerative and are now quite unnecessary, but now that the management, under a Commissioner, is removed from political control, the systems, generally speaking, serve an excellent purpose in developing the resources of the State. The whole of the railways of Victoria are owned by the State, and on June 30th 1904 there were 3,381 miles open for traffic, and 95 miles in course of construction. The whole of the lines are on the 5 ft. 3 in. or broad gauge principle, and the total cost of construction amounted to £41,216,703. The gross earnings for the year ending 30th June 1904 were £3,438,141 and the working expenses £2,022,403, thus leaving a net earning

of £1,415,738. The goods carried totalled 3,439,203 tons, while the number of passenger journeys made was set down at 54,282,003, the figures being very largely augmented by the magnitude of the suburban traffic.

The railways of Victoria are subdivided for the purposes of more efficient working into seven systems, the Northern, the North Eastern, North Western, Eastern, South Eastern, South Western, and Suburban. In these seven systems are included altogether ninety distinct lines, either main, branch or connecting, so that it would be obviously impossible to specify in detail all the particulars of them or of the districts they traverse, although some information on general direction and utility may be given. The trunk line of the Northern system runs from Melbourne to Echuca on the River Murray, passing through the important towns of Castlemaine and Bendigo and traversing the Campashe Valley. At Bendigo a line branches to Swan Hill on the Murray to the north-west. Eaglehawk on this branch is a junction for another north-westerly line to Ultima, and this line again throws off, at Korong Vale, a third and parallel branch to Sea Lake. The North Eastern runs from Melbourne to Wodonga, where the New South Wales main southern line is met at Albury, as the station is termed by the New South Wales authorities. This line throws off at Talarook an easterly offshoot to Mansfield and at Mangalore, a few miles further on, a northerly branch which extends to the River Murray at Cobram, branching at Shepparton to Katamatite. The Murray River is tapped again at Yarrawonga, the line junctioning the trunk road at Benalla. Besides the branch to Mansfield there are three others on the eastern side of this trunk line, one from Wangaratta due south to Witfield, the second from Beechworth Junction to Bright and Yackandandah and the third from Wodonga to Tallangatta. The North Western system from Melbourne to Serviceton on the South Australian border, joins the Victorian to the South Australian system, passing through such important towns as Ballarat and Ararat on the way. At Ballarat a northerly branch runs through Maryborough (itself a junction station for several connecting lines), Dunolly, Litchfield and the centre of the Mallee country to Hattah in the extreme north-west. From Ararat a line runs South to Portland on the coast near the South Australian border, while at Murtoa and Dunbocla two other "Mallee lines" go north to Hopetown and Rainbow respectively. Several other small feeder lines are thrown off from the North Western system. The Eastern system runs to Bairnsdale and on to Gippsland Lakes, and the South Eastern branches from this line at Dandenong,

to Port Albert in the extreme south-eastern corner of the State. The South Western, after passing through Geelong on the shores of Port Phillip, runs almost due west to Port Fairy, tapping the agricultural and dairying districts on both sides with short branch lines. There are several other lines running out into the districts immediately surrounding Melbourne, and the Suburban system in addition is a very complete one, providing for the requirements of the population within a twenty or thirty mile radius of the metropolis.

The Victorian Railway Department have instituted very elaborate schemes for the benefit of tourists and other visitors to the State, and excursion rates are obtainable to a most liberal extent. Holiday excursion tickets at single fare for the double journey are in the first place issued to through passengers on mail steamers during their stay in port, on presentation of a certificate from the agents of the steamer, and to pleasure parties of not less than 6 first or 10 second class passengers on special application to the Chief traffic manager. On dates specially advertised cheap excursion fares are run from Melbourne to different pleasure resorts outside the suburban area at fares of 1d. per mile second class. From the 15th November to the 30th April in each year return tickets at reduced fares are issued daily at Melbourne to various stations in the mountain districts and other tourist resorts, available for return for 3 months from the date of issue. By the last train on Fridays and by all trains on Saturdays, tickets at Holiday excursion fares, available for return until the last through train on the following Monday, are issued at all stations outside a radius of 9 miles of each other. To steamship passengers from ports west of Melbourne as well as from New Zealand and Tasmania (return tickets only from the latter State) first class through tickets to Sydney are issued at £ 2.14.0 single and £ 4 return, and to Brisbane at £ 5.6.0 single and £ 8 return, on production of the necessary certificate from the steamship agents. Tickets on the chief ocean going steamers, including the N. D. L., are available for return by rail without extra payment. At times cheap interstate excursions are also arranged and advertised. First class passengers are allowed 112 lb. and second class passengers 84 lb. of bona fide luggage free, all excess being charged at parcel rates. Luggage may be left in the cloak room at a specified charge and can be booked through by intending passengers. Refreshments are obtainable at certain stations en route, the refreshment rooms being under the supervision of the Department. Hampers can also be taken from these railway restaurants and returned at

the next refreshment station. A timetable book issued by the Railway Department contains full information on all points of railway travelling, and should be procured if facts are required beyond those contained in the above paragraph.

MELBOURNE.

The capital of Victoria is, taking all things into consideration, well worthy of its epithet "marvellous Melbourne", and can in many ways lay claim to be considered the most striking example of Australian development. Less than 70 years ago its site was virgin forest, and on the banks of the Yarra, now "civilised" almost out of all semblance to the stream it once was, Batman concluded his famous bargain with the natives who, in consideration of some "trade", assigned to him a tract of land some 600,000 acres in extent; while some few months later Faulkner arrived and really founded the insignificant settlement which to-day, in point of population, buildings and general municipal arrangement, is the premier city of the Australian Commonwealth. The settlement, which in 1836 consisted of but thirteen meagre buildings, grew apace, and the richness of the surrounding country attracted adventurous spirits from all parts of Australia, especially from "Sydney-side" who flung themselves straightway, with characteristic energy into agricultural or pastoral pursuits. But it was the golden days of the fifties that really launched Melbourne as a coming great city, and she owes more to her geographical position as the port of arrival and departure of the vast crowds of diggers, who overran Victoria in that decade, than to any other cause. Later when the fields had yielded their first richness and the affairs of the community had settled once more into their old grooves, the people of Victoria found their capital a city, and Melbourne took its place as the first of the Australian towns. It is only within the last few years that its rival Sydney has regained the supremacy, and in many respects the older town cannot yet compare with its younger competitor.

Though Melbourne cannot boast of the beauty of its natural features which makes Sydney and other towns in Australia so attractive to the tourist, it compensates somewhat for this deficiency by its artificial advantages. Situated on the banks of the Yarra some three miles above its mouth and about 40 miles from Port Phillip heads, the site of the city itself is on an area of comparatively level ground which

has permitted a regular laying out of the streets and a conformity to sanitary and hygienic principles which is of great benefit. In the city proper the principal streets are about 1 mile in length, 99 feet in width, and intersect one another at right angles. Those running east and west — Flinders, Collins, Bourke, Lonsdale and Latrobe — are named after Australian notabilities, and those with a north to south direction are Spencer, King, William, Elizabeth, Swanston, Russell, Exhibition and Spring Streets. These principal thoroughfares are well laid out, excellently paved and lighted, and in many of them trees have been planted by the municipal authorities. Outside the city boundary are also to be found in all directions streets and roads traversing the business and residential areas and serving as the arteries and veins to Melbourne.

Area, etc. The area of the city proper is about 6,000 acres, though of course the suburbs surrounding it, enlarge this very considerably. The city is divided into seven wards, for each of which there is one alderman and three councillors, the former being elected for four and the latter for three years each. The streets within the City measure 100 miles, and the number of rated tenements is about 16,000, with 18,523 ratepayers on the city roll. The annual value of property totals £1,379,937, and the capital value £13,799,370. The population of Melbourne within municipal limits is set down as under 70,000, while that of the city and suburbs numbered 501,460 at the end of 1903. Melbourne is the seventh city in the British Empire.

Climate. The climate of Melbourne (37° 33' S lat. 146° 18' E long), with a mean temperature of 57·3, has been likened to that of Madrid, Lisbon, Messina and other cities of Southern Europe, but the range of temperature is less than at any of these places. For the four seasons the mean temperature has been averaged as follows:— spring 57, summer 65·3, autumn 58·7, winter 49·2. The summer weather is rendered occasionally disagreeable by the presence of hot, dry northerly winds, but these "brickfielders", as they are locally termed, are not of long duration and are invariably followed by a cool change. It is seldom that the winter temperature falls below 40 though 27 has been recorded, while at the other extreme the thermometer has risen as high as 110 in the shade. The average rainfall, taken from figures extending over a long period of years, is 25·58 for a total of 131 days during which rain fell.

Bridges:— The River Yarra in its course through the city is crossed by several bridges (ordinary and railway),

chief among which are as follow: Princes Bridge, the main approach from the southern suburbs, an iron structure of three spans with two land openings at each end. Further down the river at the foot of Market Street is Queen's Bridge also of iron, which carries the tram and other traffic to South Melbourne and Port Melbourne. At Anderson Street a new bridge on the latest scientific principles connects East and South Melbourne, while other bridges span the stream connecting Melbourne with Kew, Richmond with Prahran, East Melbourne with South Yarra besides two iron bridges near the suburb of Hawthorn.

Harbour. Port Phillip, the Bay on which Melbourne is situated, covers an area of about 800 square miles, and offers for the greater part a good anchorage; Hobson's Bay, the harbor proper, affording accommodation for about 800 vessels. The mail steamers usually moor at one of the two large piers at Port Melbourne, but vessels drawing up to 22 feet can proceed up the Yarra right into the heart of the city.

The distance by sea to Sydney is 567 miles, to Adelaide 504 miles.

Arrival. The mailsteamers, as has been said, are usually berthed at Railway Pier, Port Melbourne, where the passenger luggage must be passed by a Custom House official. Trains leave the station at end of Pier for Flinders Street, City, every 15 minutes from 6.15 a. m. to 11.50 a. m., Sundays at less frequent intervals from 10.50 a. m. to 10.15 p. m., covering the distance of $2\frac{1}{4}$ miles in 9 minutes. (Return fares $4\frac{1}{2}$ d. first and 3 d. second class, single fares 3 d. and 2 d.) Cable trams (white car, night orange light) start frequently from near Railway Pier for Spring Street, via Collins Street, City, crossing the Yarra at Queen's Bridge, (fare 3 d.).

There are also numerous cabs and four wheelers plying for hire (see cab fares).

Books of Reference useful to the tourist are: The Melbourne Guide Book (Mc Carron, Bird & Co., 479 Collins Street, 1/—). Bradshaws Guide, (train, tram, cab and postal information 6 d.). The Year Book of Victoria (reliable general information, 1/—). The first mentioned book can specially be recommended to those desiring comprehensive information about the city.

Railway Stations. There are three terminal railway stations in Melbourne, all however comparatively close to one another, and two of them directly connected by a

viaduct. The Spencer Street Station is the terminus and starting point of the lines north of the Yarra, both suburban and long distance, in fact for all the principal routes of the colony to the west and north and for the interstate traffic beyond the borders into South Australia and New South Wales. At Flinders Street another station deals with the suburban traffic along the Port Melbourne and St. Kilda lines, while at Princes Bridge, lines radiate to the Eastern and South-Eastern suburbs and districts such as Hawthorn, Healesville, Glen Iris and Gippsland.

Tramways. The Melbourne tramway system is a most complete one, and all the principal streets are served by tramcars running out into the suburbs, in some instances for several miles. A method of transfer tickets has been adopted, whereby a passenger can pass from one tram to another without paying his fare twice over. The system is a sub-surface cable one, the trackage amounting to $43\frac{1}{2}$ miles, while an auxiliary horse system, run in connection with it, covers $4\frac{1}{2}$ miles. The uniform fare is 3 d. cash for suburban lines, but by purchasing tickets from the conductor ranging in price from 8 for 1/— for city lines to 12 for 2/9 good for any of the Company's tram or bus lines, a considerable saving may be effected.

Beach return tickets on all suburban lines to St. Kilda Esplanade, South Melbourne or Port Melbourne beaches are issued at 9 d. each.

Cars are painted with different colours and at night show light to match.

Trams run daily from about 5.30 a. m. until after 11 p. m., Sundays from about 1.30 p. m. until after 10 p. m. The tramways are under the control of the Melbourne Tramway Trust Office "The Rialto", 497 Collins Street.

Motor-bus. A State owned motor-bus service has recently been instituted between Malvern and Prahran, the distance of $2\frac{1}{2}$ miles being divided into three penny sections.

Cabs, etc. The City is well equipped with cabs, four wheelers, omnibuses and other similar modes of locomotion, the fares being reasonable and the vehicles generally tolerably well appointed.

The following fares are chargeable for public vehicles plying within the city and within eight miles of Melbourne. If hired by distance, not exceeding three persons one mile 1/—, two miles 2/—, and $\frac{1}{3}$ for each additional mile. If returning, the outward journey beyond two miles to be charged at $\frac{1}{6}$ per mile and no back fare. Five minutes detention is allowed without charge, and 6 d. for each

quarter of an hour afterwards. If engaged by time, applicable (unless by agreement to the contrary) for drives within a radius of two miles from stand, the fare is 2/— per thirty minutes and 3/— per hour. Half additional charge is made between midnight and 5 a. m.

Hotels. There are several excellent hotels in the city, both on the Australian and Continental system. Chief among them are: Menzies Hotel, William Street, the fashionable hotel and considered the best. Inclusive tariff from 12/6 per day. Scott's Hotel, Collins Street, opposite Market Street; frequented principally by men excellent table. Australian system, 12/— per day. Rooms only from 4/—.

Other popular Hotels are, The Port Phillip Hotel, The Old White Hart and the The Oriental, while at St. Kilda the George Hotel is largely patronised by those who, while desirous of being within easy distance of the metropolis, prefer to avoid dust and clamour in their leisure hours. The hotels generally compare favourably with those of other Australian cities.

The Coffee Palace system has been successfully introduced and developed and a number of residential hostelries now being on that plan. Among these may be mentioned the Grand Hotel, Spring Street, inclusive tariff from 11/— per day, room and breakfast from 6/— per day. The Federal Coffee Palace, Collins Street, inclusive tariff from 5/— to 12/6 per day, rooms from 2/— to 5/— per day.

As in all Australian Hotels, the charges made include baths, lighting and attendance.

Restaurants and Cafés. The Vienna Café, Collins Street, (cellar, café; ground floor tea room; dining rooms upstairs). Meals served a la carte. Smoking permitted in café. Open daily, including Sundays, until 8 p. m.

Dénats Café, Little Collins Street. Good Continental cooking. Closed on Sundays.

Tea and Luncheon Rooms. For light lunches, grills, afternoon tea etc. The Cecil, Collins Street. The Chicago, Collins Street. The Wintergarten, The Block. The Trocadero, Royal Arcade.

Public Buildings. The people of Melbourne are justly proud of their public buildings which convey an excellent impression regarding the past wealth of a city that could, when peopled by less than half a million souls, afford to erect them. Among the principal structures may be mentioned the following:—

COLLINS STREET, MELBOURNE

The Town Hall occupies the whole block in Swanston Street between Collins and little Collins Streets. Its designer adopted a Renaissance treatment of the classic in its architecture, and its principal frontage is faced by Corinthian columns standing on a high basement and surmounted by an attic of irregular outline, there being, including the basement, four stories in all. The Swanston Street front has a centre, two end pavilions, and two blanks, one of the pavilions being carried up into a tower 140 feet in height. A portico, through which the main entrance passes has been added and is in keeping with the general design. The basement contains fire proof rooms, a courtyard and offices, on the first floor are the Town Clerk's and City Treasurer's offices, Committee Rooms and the Great Hall, while the second floor is occupied by the Council Chamber and other municipal offices. The Great Hall is 175 feet long by 75 feet wide and 45 feet high and contains the grand organ, which latter is a feature of the Town Hall. The instrument was built by Hill and Son of London, and has four manuals — Great, Choir, Swell and Solo — 79 stops and 4,373 pipes, the open diapason of the pedal organ measuring 32 feet. The main entrance to the hall, which can seat 3,500 people, is in Swanston Street. The cost of the building with its fittings and furniture, organ and turret clock amounted to about £100,000.

Parliament House, situated at the top of Bourke Street, is one of the finest buildings in Australia, and now used by the Federal Legislature. It occupies a commanding position, and its imposing, classic front, looking straight down one of the principal streets compels universal admiration. A splendid library numbering over 50,000 volumes is attached. Strangers are admitted to view the chambers between the hours of 10 a. m. and 4 p. m. provided the house is not sitting. During the session admission to the galleries can be obtained from members of each house, to the body of the Council outside the Bar from the President, to the Speaker's Gallery from the Speaker.

The Public Offices. The Treasury is located at the head of Collins Street, and at the back are the Public Offices accommodating the Departments of Lands, Mines, etc., while the Post Office, possessing a fine clock tower, is at the corner of Bourke and Elizabeth Streets. The Custom House in Flinders Street, just opposite Queen's Bridge and Queen's Wharf, possesses an historic interest, as being built on the spot where John Pascoe Faulkner landed as the first pioneer of Melbourne.

The Law Courts in William Street constitute a splendid pile of buildings designed in the Italian style, and erected at a cost exceeding £ 300,000.

The University is a little distance from the centre of the town and is reached by tram. It also is a fine spacious building and attached to it is the Wilson Hall, a magnificent structure in the perpendicular Gothic style, as well as the three affiliated colleges Trinity, Ormond, and Queen's, and the Medical School, all standing in the University Grounds.

Markets. There are several markets in Melbourne, chief among which are the Eastern (colloquially known as "Paddy's Market") at the corner of Bourke and Stephen Streets, which a few years ago was rebuilt on a more commodious scale; the Western Market bounded by Collins, Market, Little Flinders and William Streets; Victoria Markets, a general market at the corner of Queen and Victoria Streets; the Fish Markets at the corner of Spencer Street and Wharf Road; the Meat Market in Elizabeth Street. The markets for perishable products have been fitted with extensive plants for cold storage, and in connection therewith the butter export and much of the frozen meat export trade of the State is conducted. Local requirements have also been attended to as regards fish and meat supply, and to the visitor an inspection of the facilities afforded, conveys a striking example of energy and foresight.

Other Buildings. The head offices of the Banks and other financial institutions are generally of an imposing character. The Bank of Australasia, at the corner of Collins and Queen Streets is a massive edifice in the Italian Doric style. The English, Scottish and Australian Bank is a Gothic building, and the London Bank of Australia is in the Graeco-Italian style. At the corner of Elizabeth and Collins Streets is the Equitable Life Assurance Society of U. S. A., in marble and granite, one of the most imposing structures owned by a private company in Australia. The Stock Exchange and the Chamber of Commerce are both fine buildings, the former in Queen Street and the latter close by in Collins Street.

The business houses number among them some lofty and well built edifices and in "the lane" as Little Flinders Street is named, some commanding warehouses are occupied by the principal importers. The different club houses are fine, large, substantial buildings with excellent appointments.

The Exhibitions Buildings, erected for the purposes of the Centennial Industrial Exhibition in 1888, is a cruciform building in the Carlton Gardens. The nave is 500 feet long and the transept intersecting it measures 250 feet in depth. At the intersection is the dome reaching to a height of 223 feet and on each side of the chief portal are square towers 105 feet high. The main entrance is a tall arch 40 feet wide and 60 feet high, with a flight of broad stone steps reaching up to it. The building is now given over to the State Legislature.

The Royal Mint in William Street is open to visitors. Orders to view may be obtained from the deputy master on every day except Saturday and Sunday either at 11.30 a. m. or 2.30 p. m.

The Melbourne Gaol in Swanston and Russell Streets is an extensive range of solid looking buildings of bluestone, with accommodation for 358 male and 130 female prisoners.

The General Post Office, situated at the corner of Elizabeth and Bourke Streets, opens daily from 8.30 a. m. to 8 p. m., Sundays excepted. The ordinary weekly mail to London and the Continent of Europe closes every Wednesday, for ordinary letters at 2.15 p. m. and for late letters up to 4 p. m. at the General Post Office, and 4.39 p. m. at Spencer Street Railway Station. Registered letters must be posted before 11.45 a. m. on Wednesday. Penny postage prevails throughout Victoria, but letters marked "urgent" are charged a 6d. fee in addition. The interstate rate, extending to New Zealand, Fiji, the New Hebrides, and New Guinea is 2d., and to the United Kingdom and Foreign Countries 2½d. The rates for newspapers range from ½d. to 1d. for 10 oz. to any part of Victoria and to the United Kingdom from ½d. to 1d. for every 4 oz.

Consulates:— Argentine Republic, 562 Bourke Street. Austria Hungary, 314 Flinders Lane. Belgium (C. G.), 353 Flinders Lane. Bolivia, 473 Collins Street. Brazil, 383 Collins Street. Chili, 405 Collins Street. Colombia, 157 Queen Street. Denmark (C. G.), 412 Collins Street. France, 510 Little Collins Street. German Empire, 119 William Street. Greece, 443 Bourke Street. Hawaii, Kooyong Road, Elsternwick. Italy, 135 William Street. Japan, 98 Queen Street. Liberia (C. G.), 173 Swanston Street. Netherlands (C. G.), 119 William Street. Nicaragua, 31 Queen Street. Paraguay, 377 a Collins Street. Peru, 411 Collins Street. Portugal, 423 Collins Street. Russia (C. G.), 475 Collins Street. Servis, 450 Collins Street. Spain, 351 Flinders Lane. Sweden

and Norway, 17 Queen Street. Switzerland, 119 William Street. Turkey, 37 Collins Street. U. S. A. (C. G.), Equitable Buildings, Collins Street. Uruguay, 45 Queen Street.

Churches. The places of worship of note in Melbourne are: St. Paul's Cathedral (Church of England), at the corner of Swanston and Flinders Streets, which presents a very fine exterior, while the fittings and ornamentation of the interior are also of the most elaborate description. Its length is 270 feet and width 126 feet, and the central tower, when completed, will be 156 feet high. It has accommodation for nearly 2,000 people and contains an exceptionally fine organ. St. Patrick's Cathedral (Roman Catholic) on Eastern Hill is another noble edifice. The Scots Church in Collins Street has a steeple 211 feet in height, while facing it, across Russel Street is the Independent Church, built in the Saracenic style of bricks and freestone with a square campanile. The principal Baptist Church is in Collins Street and the leading Wesleyan Church in Lonsdale Street. Other Churches in and around Melbourne are: St. Peter's, close to St. Patrick's Cathedral, The Unitarian Church, the German Church in the same neighbourhood, St. Enoch's (Collins Street), the Synagogue in Bourke Street west, St. John's (Elizabeth Street).

Hospitals and Charitable Institutions. The Melbourne Hospital, situated in Lonsdale Street between Swanston and Russell Streets, is one of the most complete of its kind in Australia. The visiting days are Sunday and Wednesday from 2 to 4 p. m.

The Childrens' Hospital, another fine institution in Drummond Street, Carlton, has the same visiting hours.

In the Commercial Road St. Kilda, is the Alfred Hospital, supported entirely by voluntary contributions. The Deaf and Dumb Institution in St. Kilda Road is open to visitors 10.30 to 11.30 and 2 to 3 p. m. on Tuesdays and Thursdays, and the Royal Victorian Institute for the Blind, also in St. Kilda Road, has its visiting day on Friday from 2 to 5 p. m.

The State exercises a control over neglected children and those sentenced to a term in a reformatory, and the Industrial School which is a receiving depot for such cases may be inspected by persons holding an order, obtainable at the office for neglected children, King Street. Other charitable institutions of note are the Benevolent Asylum for aged and infirm people, the Immigrants Home, the Women's Hospital and the Homoepathic Hospital. The principal Hospitals for the Insane are at Yarra Bend and

Kew, both within easy distance of the metropolis, while subsidiary hospitals have been established at Ararat, Beechworth, Ballarat, and Sunbury, with lunacy wards at the Hospitals of Geelong, Bendigo and Castlemaine.

Fire Brigade. The Head station of the Metropolitan Fire Brigade is at Eastern Hill, where a complete fire fighting equipment and an efficient staff is located. At headquarters there are nine steam fire engines, three manuals, ninety four reels (horse and hand) having 90,000 feet of hose, nine extension ladders, one fire escape and other appliances. The head station is in direct communication with all other stations in the city and suburbs by telephone, and many of the principal business premises have also direct fire alarm lines. Fire alarms are affixed to telegraph poles at the intersection of the principal streets of the city, and there are fire alarm circuits passing through the suburbs.

Press. The two morning dailies of Melbourne — The "Argus" and "Age" — enjoy a very large circulation which extends not only throughout the State but beyond its borders into the Southern districts of New South Wales. There is only one evening paper — the "Herald", holding a monopoly of the city. Among the weeklies are the "Australasian", a most readable periodical published from the "Argus" office and much in request in the country districts, the "Leader", the "Weekly Times", "Punch", "Sportsman", "Table Talk" and the "Every Saturday", a popular compilation of general matters of interest published from the "Age" office, besides several others of less importance. The dailies are all sold for 1 d., while the weeklies vary from 6 d. to 1 d.

PLACES OF INTEREST AND AMUSEMENT.

Theatres, etc. The Princess, in Spring Street almost opposite the Houses of Parliament, a handsome and luxuriously furnished playhouse. The Opera House in Bourke Street, and the Theatre Royal directly facing it. Her Majesty's and the Bijou, the latter being devoted to vaudeville the whole year round.

At all the theatres the best plays and players to be seen in Australia appear, and for the greater part of the year every one of them is open. Recitals on the Town Hall organ are given weekly, and the Great Hall is generally utilised for all concerts and other musical entertainments. Other halls adapted for the same purpose include the Victoria, Hibernian and Temperance Halls.

National-Gallery. The National Picture Gallery is in the Public Library Building, Swanstown Street North, and contains a fairly comprehensive collection of pictures from the brush of English, Continental and local artists, though the necessity for retrenchment on the part of the Government of late years has occasioned the curtailment of the subsidy and the consequent hampering of development. This disadvantage is met in part by the interchange of pictures with Sydney and Adelaide. In the Public Library Building also is the Museum of Sculpture, where some well executed copies of the Elgin marbles and casts of other ancient and modern sculpture are among the attractions, as well as examples of the work of Victorian artists. The following courts comprise the collection.

I. The Latrobe Gallery, containing some fine oil paintings, among which some of the following are the most popular (the original prices are given in parentheses). "The First Cloud", W. Q. Orchardson, R. A., (£ 2,750); "Quatre Bras", E. Thompson (Lady Butler, £ 1,500); "Anguish", A. F. A. Schenck (£ 1,200); "The Traitor", P. Ivanowitch (£ 1,000); "La Defenestration", V. Brozik (£ 1,500); "Challenged", John Pettie R. A. (Donated); "Autumnal Showers", Peter Graham R. A. (£ 577); "Love and Death", G. F. Watts R. A. (£ 840); "African Panthers", I. M. Swan A. R. A. (£ 520); "The Vintage Festival", L. Alma Tadema R. A., R. W. S. (£ 4,000); "Ulysses and the Syrens", J. W. Waterhouse" A. R. A., R. I. (£ 1,260). "The Last Moments of Chlodobert", Albert Maignan (Donation); "A Flitting Gleam Before the Storm", K. Heffner (£ 500); There is also a fine specimen of marble sculpture in this Gallery, "Young Bull and Herdsman" by Sir J. E. Bolhm, Bart. R. A., (£ 1,000).

II. The Stawell Gallery, contains among a number of pastel and water colour drawings some etchings by Rembrandt, Van Dyck and Dürer, also a few specimens of sculpture among which "Eve" by P. Mac-Dowell (£ 189) and "Daphne" by Marshall Wood (£ 1,000) are the principal specimens.

III. The Vestibule, holds a collection of etchings, presented to the Gallery by Her Majesty the Queen of England in 1893. Seven of these works were etched by the Queen and five by the Prince Consort. Besides these there is a set of twelve etchings by Max Klinger and a portrait of Her Majesty the Queen by Professor Herkomer R. A., R. W. S. (£945).

IV. The McArthur Gallery contains a collection of oilpaintings, among which are: "Italian Brigands", J. Lya-raud (£ 400), "The Morning After Trafalgar" (£ 1,200), "Moses

bringing down the Tables of Law", John Rogers Herbert R. A. (£ 1,700, replica of original in House of Lords).

V. The Buvelot Gallery, partitioned into eight bays, containing: First bay, portraits of Governors; second and third bays, miscellaneous collection of etchings, engravings, water colour drawings, etc.; fourth bay, publications of the Arundel Society and autotype reproductions; fifth bay, collection of studies in oil by Mrs. G. F. Folingsby; sixth to eighth bay, oil paintings; south wall, oil paintings, engravings, drawings, lithographs, medallions.

VI. The Rotunda, contains sculpture, among which some fine originals and replicas of well known works are in evidence.

VII. and VIII. Cast Gallery. Both rooms embrace a good collection of copies of well known works.

The Gallery is open daily free of charge from 10 a. m. till 5 p. m.

The Victorian Artists Society is in Albert Street. Annual Exhibition in October and November.

Public Libraries. The Melbourne Public Library together with the Museum of Sculpture and the National Art Gallery, occupies the whole block bounded by Swanston, Latrobe, Little Lonsdale and Russell Streets. The library, with which an extensive lending branch is in connection, possesses a fine collection of books and pamphlets, numbering between 300,000 and 400,000 volumes. It is open daily (except Sundays) from 10 a. m. to 10 p. m.

The Prahran Public Library in the Town Hall, Chapel Street, contains 11,000 volumes and is open from 10 a. m. to 10 p. m. daily, except Sundays.

At the Melbourne Athenaeum, formerly known as the Mechanics Institute, the supply of magazines and periodicals is most complete, and there is a circulating library of over 160,000 volumes, while its reference library is especially replete in literature concerning the early history of Australia.

The municipalities of Port Melbourne, Hawthorne, Richmond and others have also well selected libraries, and generally the city is well supplied with literary institutes.

The National Museum which is, together with the Industrial and Technological Museums and Art Gallery, contained in the Public Library Building, Swanston Street, has a fine collection of stuffed animals, arranged by

Professor Spencer F. R. S. The Ethnological collections are situated on the ground floor, the Australian section being particularly noteworthy.

In the Industrial Museum are found collections illustrating the manufacture of metal, pottery, chemicals, etc., also a number of models, showing the process of ship building.

The Technological Museum comprises a most instructive collection of the various appliances connected with arts and crafts and a comprehensive object lesson regarding the resources of the State.

Open daily from 10 a. m. to 5 p. m.

The Exhibition Building whose imposing dome is a prominent feature of Melbourne, stands in the Carlton Gardens and may be reached either by Nicholson Street or Collingwood tram (2 d.). The main building, which contains the largest hall in Melbourne, is usually closed, but as it is often engaged for concerts, fêtes, bazaars etc., visitors can avail themselves of such an opportunity to inspect the interior.

The Aquarium forms part of the Exhibition building and should not be missed by the visitor. It contains a large variety of fish and other marine animals, including sharks, seals, sea lions, penguins, etc. There is also an aviary and an interesting museum in connection with the aquarium, and public entertainments of various kinds are frequently given there. It is open to the public daily from 11 a. m. to 5 p. m.

At the Observatory, east of St. Kilda Road (St. Kilda or Prahran tram) a very complete assortment of astronomical and meteorological instruments has been assembled, and the great equatorial telescope ranks among the finest in use. The visiting day is Wednesday, between the hours of 2 and 4 in the afternoon.

Clubs. Australian, 102 William Street; Melbourne, 36 Collins Street; Bohemians', 287 Collins Street; Melbourne Savage Club, Queen's Walk; Commercial Travellers' Association, 190—2 Flinders Street, the best appointed of its kind in Australia; Naval and Military Club, 178 Collins Street; Yorick Club, Victoria Buildings Collins Street; Celtic Club, Swanston Street; Old Scotch Collegians, Queen's Walk, Collins Street; German Club, Alfred Place; and the Austral Salon, a womens' club. The Deutscher Turn Verein in Latrobe Street pays attention both to the cultivation of gymnastics and to social intercourse, the various entertainments being carried out in characteristically German style. Visitors to Melbourne may be admitted if approved by the Committee.

Public Resorts, Gardens, etc. The City of Melbourne is very well supplied with public reserves, and the numerous parks and gardens in the City and its environs are much patronised by the public.

Botanic Gardens. Chief among such may be ranked the Botanic Gardens, on the upper Yarra about $1\frac{1}{2}$ miles from Town. The trip thither can be made by boat from Princes Bridge or by the South Yarra tram. The Gardens cover about 100 acres, and within them are to be found a valuable collection of choice plants and trees. Each has been distinguished by its botanical and vernacular names, displayed on a label attached, and other instructive facts are added, while in laying out the grounds the element of picturesqueness has by no means been lost sight of.

The Fitzroy Gardens, situated at the rear of the Treasury and Public Offices at the top of Collins Street, have been beautifully laid out and have become a very favourite resort. Every opportunity has been taken to make the reserve an example of what landscape gardening can do, and the natural features of the locality consisting of undulating ground intersected by water courses, have been advantageously utilised. A splendid fernery is attached and the numerous shady walks are provided with seats, etc. The gardens are open from sunrise to sunset.

Flagstaff Gardens in West Melbourne are also charmingly laid out and are always open to the public.

Other parks and gardens, all largely patronised, are the Royal, Princes and Studley Parks on the north, the Grace, Richmond, Fawkner and Albert Park on the east, while within the confines of the city itself are the Yarra Park and Carlton Gardens, otherwise known as the Exhibition Gardens. At Albert Park a lake has been formed which is much used for yachting and boating. The Carlton Gardens contain a fine aquarium and fernery besides a cyclorama, all of which offer a lasting attraction both to residents and visitors.

Zoological Gardens. A section of the Royal Park has been set aside for the Zoological Gardens which are open daily from 9 a. m., the hours of closing being 4.30 in winter and 6 p. m. in summer. The gardens contain a large number of animals collected from all parts of the world, birds being particularly well represented. A space in the gardens has been devoted to picnic parties, and hot water is provided free. Admission:— Mondays, Adults 1/—, Children 6d. Other week days, Adults 6d., Children 3d. Sundays free. Trams from the south end of Elizabeth Street run to the Gardens, the fare being 2d.

St. Kilda Esplanade. One of the most popular resorts is St. Kilda Esplanade upon which the energies of the municipality have been centred for several years in order to make it one of beauty spots of the metropolis. The promenade which has been very ably planned and constructed is in fine weather crowded with people anxious for a few hours respite from the heat of the city, and as the esplanade is right on the shores of Hobson's Bay, fully open to the invigorating sea breezes, the attractions are manifest, especially when it is mentioned that band music is provided at frequent intervals. The esplanade is easily reached from the city by train or tram, the fare being 3d. by either method of locomotion.

Recreation Grounds. In addition to the above resorts there are of course the various sports and recreation grounds, including the far famed Flemington Racecourse, one of the most lavishly appointed in the world, the Caulfield, and other minor racecourses, the Melbourne Cricket Ground, universally praised by visiting teams, besides other sporting reserves.

EXCURSIONS.

For the visitor who is not prepared for a long stay in Victoria and cannot in consequence leave Melbourne on any of the "up country" trips, there are numerous places on the neighbouring hills and round about the shores of Port Phillip which afford an enjoyable day's outing and which have in some cases been designed especially to meet the wants of the picnic party, while those desirous of a river trip may hire hoats at reasonable rates at Princes Bridge. Inland from Melbourne for example is

Healesville, (altitude 267 feet, distance 39 miles) which has only recently come into notice as a tourist resort, but whose surrounding mountain country is now considered among the most beautiful in the State, and indeed offers some grand scenery. From Healesville a seven mile walk may be taken to the former site of the village Fernshaw. The roads winds its way in a zigzag fashion along the mountain side and those fond of wild and picturesque forest scenery will not fail to appreciate the long walk. Mount Inlict (3,700 feet) may be ascended by a path after the sixth mile-stone from Healesville. For a one day trip, leave Princes Bridge Station at 7.37 a. m., arriving at Healesville at 9.50, returning by train leaving Healesville at 8.5 p. m. On Sundays the trains leave Princes Bridge Station at 11.15 a. m., returning at 6.40 and arriving in Melbourne at 8.43 p. m. The fare is

8/3 first and 5/3 second, return. Holiday excursion 6/3 and 4/— respectively. Another favourite one day trip is, to

Yan Yean, (good hotel, altitude 571 feet, distance by rail $23\frac{1}{2}$ miles) where, in addition to the natural beauties of the surrounding country, the water reservoir, which feeds the city with pure water, may be inspected. The scheme is due to the unresisting efforts of Governor Latrobe, who in 1854 shortly before leaving the colony had the satisfaction of turning the first sod of the work of damming the upper part of the Plenty River to construct what is now known as the Yan Yean reservoir, Yan Yean being the native name of the place. The lake which is irregular in shape and covers an area of 1,360 acres, is about 2 miles in length and over a mile wide, averaging a depth of 17 feet, thereby impounding about 6,400,000,000 gallons of water.

A walk or drive of $3\frac{1}{2}$ miles (traps may be hired at Daniel's Hotel) takes the traveller through some pretty country to Whittlesea, the terminus of the railway line. The train service is infrequent and the visitor must avail himself of the train leaving Spencer Street Station at 10.47 a.m. on week days, Saturdays excepted, returning from Whittlesea at 8.5 p.m. Saturdays leave Spencer Street Station at 1.33 p.m., leave Whittlesea at 8.5 p.m. Sundays leave Spencer Street Station at 11.5 a.m., leave Whittlesea 7.28 p.m. Fare to Whittlesea 3/8 first return, 2/6 second return, to Yan Yean 2/5 first return, 1/9 second return.

As the train service is not a good one (the journey by train occupies over two hours) it is advisable for those who do not mind the extra cost, to hire a vehicle for the trip. Cyclists will find the road a fairly good one.

Upper Fern-Tree Gully, (distance 25 miles, altitude 414 feet) has beautiful mountain scenery as the name implies, and forms a pleasant day's drive from the city. A climb of over 1,500 feet brings the pedestrian to the summit of the Dandenong Range. Ferntree Gully may also be reached from Princes Bridge Station. Trains leave at 6.10 a.m. and 9.20 a.m., arriving at Ferntree Gully at 7.45 and 11 a.m. respectively, and returning at 12.40 and 7.52 p.m. Return fare, first class 3/—, second class 2/2. A picnic hamper is advisable.

For the sportsman with rod and gun who is prepared for a long stay, the Gippsland Lakes and the Midland district offer many opportunities. Rabbits, hares, etc. and wallabies in the more isolated parts, as well as black swan, duck, teal, plover, quail, pigeons and so on, can generally be bagged in the season about the Lake country, where good

sea fishing is also obtainable. In the neighbourhood of Daylesford, Gisborne, Macedon and other little townships in the Midland district, most of the creeks and lakelets now contain besides the fish indigenous to the country, three varieties of trout (English, Rainbow and Californien), of which specimen up to 5 and 6 lb. in weight are not infrequently caught. The following specimen tours will give the intending tourist an approximate idea of distance, cost etc.

Gippsland Lakes. Trains leave Princes Street Station daily, (Sundays excepted) at 7.55 a. m., arrive Sale ($127\frac{1}{2}$ miles) at 1.30 p. m., arrive Bairnsdale ($170\frac{3}{4}$ miles) at 3.21 p. m. (Return fares, first class $45/8$, second class $30/8$). Steamers connect both at Sale and Bairnsdale on arrival of train and take visitors to Cunningham (Lakes Entrance) arriving about 7.30 p. m. The following morning the coach may be taken to Lake Tyers House (1 hour's drive) from whence a steam launch runs to Toorloo and Nowa Arms, affording opportunity for good fishing and shooting.

Thomas Cook's Tourist Agency arranges the trip from Melbourne to Cunningham via Bairnsdale, returning via Sale or vice versa, inclusive of one week's hotel expenses at Cunningham for $81/-$.

Daylesford, (altitude 2,039 feet, distance $75\frac{3}{4}$ miles). Trains leave Spencers Street Station daily (Sundays excepted) at 6.40 a. m. and 4.50 p. m. (besides a slower train at 12.15 Thursdays excepted), arriving at Daylesford at 10.55 a. m. and 8.15 p. m. respectively. (Return fares, first $20/8$, second $13/9$.)

Daylesford, a town of nearly 4,000 inhabitants was first settled by gold diggers at the end of 1853, and its alluvial and quartz mines still give employment to nearly 1,000 men. There are several mineral springs in the district, the principal one being the Hepburn (distance 2 miles, coach $1/-$ return), which contains carbonates of lime, magnesia, soda, iron and other minerals in solution, charged with natural carbonic acid gas. There are three hotels and several boarding houses at Hepburn Springs, charging from $4/6$ to $6/-$ per day or $20/-$ to $30/-$ per week.

Another spring is at Jubilee Lake (distance 2 miles, coach $2/-$), where some good fishing can be had. Licenses to fish $1/-$ per day or $5/-$ per annum.

Buggy and two horses to tour the surrounding country may be hired at the rate of $25/-$ per day, buggy and one horse $15/-$. Numerous hotels, coffee palaces and boarding

houses offer accommodation from 6/— to 8/— per day, or 20/— to 42/— per week. The actual cost of a week's travelling to any similar places should not exceed 15/— per day including hotel expenses.

SEASIDE RESORTS.

All round the shores of Port Phillip, from Sorrento on the east to Queenscliff on the west, are scattered numbers of watering places more or less easily reached from Melbourne by train or boat, and largely patronised notably by the floating but also by the residential sections of Melbourne's population.

Queenscliff is on the northern side of the peninsula which forms the western "head" of Port Phillip, the journey there being undertaken either by train or boat, the latter being the more preferable. It is about 3½ hours' journey by train, and the fast passengers steamers do the journey in two hours. The town is well laid out, and has good hotel accommodation and there are numerous points of interest, including some fine caves, besides the usual features of a thriving watering place.

Sorrento. One of the most popular places on the east side of Hobson's Bay is Sorrento, still without railway communication with the metropolis. The little town has the usual attractions, and as it is only separated by a narrow neck of land from Bass Straits, a fine ocean beach is also available.

Steamers for Sorrento and Queenscliff leave Port Melbourne Pier daily from the beginning of November to end May at 10.15 a.m. returning to Melbourne about 7 p.m., thus giving the visitor several hours on shore. Return fare 3/6.

Port Arlington, etc. Not very far distant from here but nearer to Melbourne, is Port Arlington, to which place there is a daily coach from Drysdale, a station beyond Geelong on the railway line, while the comfortable steamboats which traverse the Bay also call there daily throughout the year. There is a fine sandy beach here extending from St. Leonards to Clifton Springs, both of which places have some repute as seaside resorts. Between Port Arlington and Geelong is Point Henrey, where a private company some years ago laid out a considerable area with a view to establishing an excursionist resort and sanatorium. Boats call there regularly in summer but the winter season

does not offer sufficient inducement. On the eastern side of the Bay the resorts are more numerous. Nearest of all to Melbourne is St. Kilda, but as that suburb is now an integral part of Melbourne it can hardly be classed as a pleasure trip outside the city limits.

The Brighton and Sandringham line is perhaps the most favoured by those desirous to spend a day out of Melbourne. Brighton itself is only $7\frac{1}{2}$ miles distant from Melbourne and may indeed be considered a suburb, with trains running frequently there and back. At Brighton there is a good beach, abundant facilities for bathing and fishing, while inland there are some interesting walks about the rising ground towards the east. At Sandringham a few miles further on, and the present terminus of the railway line, the same conditions obtain, and a tramway runs thence to Cheltenham and Beaumaris, skirting the shore of the Bay for the whole distance. Both are pretty little places, much patronized by those in search of a day's pleasure, and as they are only some 14 or 15 miles from Melbourne it is quite possible to drive there and back in a day, via St. Kilda and East Brighton. Two miles further on and 16 miles from Melbourne is Mordialloc, situated at the mouth of a creek of the same name and possessing the usual seaside and picnic attractions in the shape of boating, fishing and shooting. The next place of note is Frankston on the railway line to Stone Point, $26\frac{1}{2}$ miles from Melbourne. It has been designed with an eye to "summer boarders" and the surrounding district is rendered attractive by the good shooting obtained there, quail, hares and snipe being plentiful. Should, however, a more extended stay in the district be projected, the head quarters should be at Mornington (altitude 61 feet, 39 miles by rail from Melbourne, fares $8/3$ first and $5/3$ second return), a fair sized town with good accommodation for travellers. Rides and drives may be taken in all directions, sport of all kinds is good, and the climate is bracing. About an hour's drive from Mornington is Drumona, a place only needing the railway to make it a favourite resort. Steamers run there frequently from the metropolis.

In addition to these outings the tourist can avail himself of the following combination tickets issued by Cook's Tourist Agency:—

Airey's Inlet — By rail or steamer to Geelong, thence by coach leaving Geelong at 2 p. m. daily, Sundays excepted. Fares — rail and coach, $22/6$ first, $20/$ — second class; steamer and coach $17/$ —.

SCENE ON THE UPPER ST. GEORGE RIVER, LORNE, VICTORIA.

Anderson's Inlet — By rail to Outtrim thence by coach running tri-weekly in both directions. Fares — 21/6 first, 16/6 second class.

Anglesea — By rail or steamer to Geelong thence by coach leaving Geelong at 2 p. m. daily, Sundays excepted. Fares — rail and coach, 17/6 first, 15/— second class; steamer and coach, 12/—.

Clifton Springs — By steamer to Portarlington, thence by coach running to connect with steamer. Fare — 5/6.

Jamieson — Leave Spencer Street by 6.45 a. m. train, connecting at Alexandra Road Station with coach on Mondays, Wednesdays and Fridays. Fares — First class £ 2.1.5, second class £ 1.12.9.

Lake Cooper — Rail to Elmore, thence by coach daily. Fares — £ 2.0.5. first, £ 1.9.1 second class.

Lorne — By rail to Dean's Marsh, thence by coach daily, running to connect with trains. Fares — £ 1.8.6 first, £ 1.2.5. second class.

Marysville — Rail to Healesville, thence by coach leaving Healesville at 10 a. m. via Fernshaw, The Hermitage and Narbethong. Fares — First class, 18/—, second class, 15/6.

Mt. Gambier — Leave Spencer Street week days 7.45 a. m. arrive Casterton 8.25 p. m., coach leaves Casterton 8.15 a. m., arrive Mt. Gambier 1.15 p. m. Fares — first class, £ 2.13.10 single, £ 4.3.4 return: second class, £ 1.19.4 single, £ 3.1.7 return.

Ocean Grove and Barwon Heads — By rail or steamer to Geelong, thence by coach leaving 9 a. m. and 2 p. m. daily, running to connect with steamer. Fares — rail and coach 12/6 first, 10/— second class: steamer and coach, 8/—.

Peterborough, Port Campbell, or Princetown — By rail to Timboon, thence by coach Tuesdays, Thursdays and Saturdays, returning Tuesdays, Thursdays and Saturdays to connect with train to Melbourne (daily from 16th December to 31st January). Fares — to Peterborough, £ 1.17.10 first, £ 1.7.9 second class: To Port Campbell, £ 1.16.10 first, £ 1.6.9 second class: to Rivernook House £ 2.4.4 first, £ 1.14.3 second.

Torquay — By rail to Geelong, thence by coach, leaving at 9 a. m. and 2 p. m. daily leaving Torquay for Geelong at 10 a. m. and 1.30 p. m. Fares — 12/6 first, 10/— second class: by steamer to Geelong thence by coach 8/—.

BALLARAT.

Ballarat, (altitude 1416 feet), the second town of the State, is distant 74 miles by rail from Melbourne (R. fares I. class 10/3, II. class 7/—. Holiday exc. 7/— and 5/2 resp.) in a north-westerly direction; Yarrowea Creek dividing the city into two parts, each a distinct municipality. It is an important junction station, no less than six branches joining the trunk road to Melbourne. The town itself is substantially built, many of the business premises and private residences attaining metropolitan standard. The places of interest include a theatre, a well equipped art gallery, museum, public libraries, and several reserves, of which the Botanic Gardens covers 750 acres. In the Gardens is Lake Wendouree with an area of 600 acres, well stocked with imported fish, and a good angling ground. In the two municipalities of Ballarat East and Ballarat West there are over 100 miles of streets. Ballarat is famous as being one of the first places where gold was discovered in Victoria (in 1851), and mining is still its most important industry, although both agricultural and pastoral pursuits have made considerable headway in recent years. Alluvial mining is still productive of very fair returns, but reefing is now being energetically carried on and deep sinking has been adopted by the big proprietary companies. Several of the shafts are down below the two thousand feet level, and one or two are now approaching 3,000 feet. An inspection to the mines is part of the regular programme of visitors to Ballarat, and the various managements are usually ready enough to afford facilities for viewing the underground workings. Ballarat has also an historic interest as it was the place where the miners in 1854 broke out in open rebellion against the authorities, declared a republic of Victoria and came into direct conflict with the military. The site of the Eureka stockade, where the rebels entrenched themselves, is now marked by a monument. Ballarat is a cathedral city, both Anglican and Roman Catholic bishops being stationed there. It is well supplied with schools, etc. According to the last census its population was 43,823. Hotels:— Craig's Royal, Lester's, and Ballarat Palace Hotel.

BENDIGO.

Bendigo, (altitude 758 feet), another important mining town, lies on the railway between Melbourne and Echuca, about 100 miles from the former (R. fares: 1st 27/—, 2nd 18/3).

from Spencer street station), and is a railway centre of some note. Bendigo has been picturesquely planned, the main street being only built upon one side, the other being occupied by a reserve in which are the public buildings and law courts. Besides the Rosalind Park as it is called, there are three other recreation reserves in the city and several smaller parks, while it is traversed by over 100 miles of streets and served by a most efficient water supply. Quartz mining is extensively carried on, the discovery of the reefing area, following on the working of the rich alluvial deposits, giving the town its present prominence. Deep sinking has reached a lower level than in Ballarat, and the gold output is larger than that of any other centre. Some of the mines are working below 3,500 feet, with good results, the Victoria (3,750 feet) being the deepest shaft on the field. Pottery works, breweries and other manufactories are in operation, and in addition the wine industry has resulted in some fine brands being put on the market. The population of Bendigo totalled, on March 31st 1901, 30,774. Hotels: Shamrock, and City Family Hotel.

GEELONG.

At one time it was thought that Geelong would be the capital of Victoria, and in the early days it was a very serious competition, as regards trade, with the capital. It is situated on Corio Bay, an inlet of Port Phillip, and by rail is 45 miles south west from Melbourne. In addition steamers ply daily to and fro, the return fare being very moderate. The town has many ornate buildings and private business houses and is a manufacturing centre of no mean order. Moreover, an export trade has been established which is of some magnitude, wool and other pastoral produce passing over the wharves direct for England and other oversea ports. The harbour facilities are continually being improved, and the wharfage accommodation is adequate. Geelong is the outlet for a great amount of inland trade from the western and north-western districts, both for agricultural and pastoral produce. The surrounding districts are occupied both by farms and orchards, and latterly the growth of the vine has had attention again. The population totals 18,289.

Geelong may be reached either by train from Spencer street station (distance 45 miles, time 1 hour 40 min. R. fares 1st 11/3, 2nd 7/6), or, on weekdays, by the steamer "Courier" leaving Queen's Wharf, Flinder Street daily at

10 a. m. and returning to Melbourne between 6 and 7 p. m., thus giving the visitor about 3 hours in the town. (R. fare 3/6). "Victoria Hotel".

EAGLEHAWK.

Eaglehawk (altitude 737 feet), is really an offshoot from Bendigo and is dependent upon the same auriferous country for its existence. It is distant 4 miles from the larger town on the same line of railway, and some of the richest and most profitable mines in the State are worked there. It has earned the name of "the model borough" from the excellent way in which it has been laid out. Population 8,367. Distance from Spencer street station 105½ miles. R. Fares Ist 25/9, IInd 19/1.

WARRNAMBOOL.

Warrnambool, (altitude 33 feet), forms an outlet of trade for the Western and South-Western districts and is in direct communication with Melbourne both by train (166 miles) and steamer. The harbour facilities have been carefully planned and the exports are mainly dairy produce, potatoes, wool, and vegetables. It has a reputation as a summer resort, being one of the coolest places in the State. Its population was set down at 6,404 at the last census. (Train from Spencer street station. R. Fares Ist 44/11, IInd 29/10.)

NEW SOUTH WALES.

To the traveller anxious to acquaint himself with the conditions of life in Australia, to learn something of the manner in which the Australians live, move, and have their being, perhaps no State of the Commonwealth affords greater facilities for the gleaning of information than New South Wales. Other States may have advanced further along certain lines, Victoria may have more manufactories, Queensland larger stations, South Australia wider wheat fields and Western Australia richer gold mines, but no State can show such a consistently high level in agriculture, pastoral and mining pursuits combined as the Mother State of the Australias. And it is right that it should be so in view of the fact that she is the eldest of the group, has had time for development, and possesses the largest population, though in the last named aspect she is close pressed by Victoria. No matter what the special line of investigation is, along which the visitor wishes to travel, he will as soon as he lands in Sydney find ready to hand evidence and object lessons enough to satisfy him. If it be the agricultural conditions he is desirous of observing he has a wide choice. He can gain some idea of semi tropical agriculture on the cane fields of the north-eastern coast, and of the maize lands on the alluvial river flats of the same district. For wheat growing he may go over the range to the Bathurst Plains or further south to the rich Riverina lands through which the Murray, the Murrumbidgee, the Lachlan and the Darling flow. Other grains and agricultural produce generally he will find throughout the State. Dairying extends practically along the whole coastal belt but its principal centres are the North and South coast districts, in both of which an export basis has been reached. In the interior, pastoral pursuits are everywhere in evidence and the visitor can with little difficulty follow the whole process from the sheep and cattle on the run to the wool in the ship's hold or the frozen meat in the refrigerating chamber. Sheep and cattle stations may be visited anywhere within a few days' journey of the metropolis, whether that station be the old established home of a Riverina squatter, possessing all the attributes of an English country house, or a pioneer station in the back blocks, where a slab hut is all the homestead, and the foundation of future prosperity is yet in the process of being

laid. The preparation of pastoral products can be seen with less expenditure of time and money and much nearer Sydney: boiling down works, meat preserving works, freezing works and so on are always ready to hand. In mining there are all grades of mineral production working, from the spade and wash dish of the prospector to the complicated machinery and modern treatment of a big gold field on a reefing area, the immense operations in silver and silver lead production at Broken Hill, the copper mines of Cobar or Nymagee or the extensive and busy coal mines of Newcastle or the Illawarra district. In secondary production large factories, turning out the manufactured article in quantities not only sufficient for local requirements but, in some cases, also for export, are at work throughout the metropolitan area within easy distance from the centre of the city.

The student of political or social economy will also find much food for thought during his sojourn in New South Wales. He will have at his disposal the history of a community that has always been democratic, has never been laid under the rule of a monarch or a despot, has from the first days of its responsible government been administered by men, elected from its own ranks, actuated by its own aspirations and bred in its own atmosphere. The present is no place for discussion of the faults and misfortunes of the political administration of New South Wales, but the searcher for information will decidedly not find opportunities lacking in the way of gathering evidence or forming conclusions from press or public so soon as ever he begins his work. The suggestion may however be offered that material in plenty may be obtained if an investigation be made of the Factories and Early Closing Acts, the Arbitration Act and the work of the Arbitration Court, the arbitrament of indigent old age, the facilities obtaining for land selection, the organisation of labour in the many trade unions, and the principles of day labour and a minimum wage, which at the time of writing are such favourites with the Department of Public Works and Railways. Furthermore there is every chance of studying the traits and temperaments of the typical Australian, from the dweller in the city who differs but little from his European brother, to the distinctive products of the soil to be found only where nature has to be fought in a hand to hand conflict on station or selection. There is the Australian artisan, more independent, more certain of himself than the European, the factory hand, unbound by tradition and changing his or her employment with an ease and a nonchalance that has no parallel in older cities. There are the hundred and one types that

have evolved along the lines of the survival of the fittest — the shearer, the stockman, the jackass (now rapidly growing scarce), the station and farm hand, the prospector and the swagman. The last corresponds in part to the tramp of the American States, but with the difference that in Australia the itinerant workman is more certain of food supply and less troubled by unfavourable climate. It would however be impossible to enumerate a tithe of the types lying ready to the hand within the borders of New South Wales. The traveller who has eyes and ears open will have no difficulty in finding them. They will obtrude themselves at every turn, and it is only the flying visitor who fancies himself capable of writing a book on Australia and the Australians. The longer one stays in the Commonwealth, the more clearly one realises that it is only a lifelong experience that will fit him for that task. No matter how long he may stay he will depart with the knowledge that, although his experience has been much improved and his gallery of types greatly enlarged, there is still left a field of interest whose attractions he is loth to leave.

And for the ordinary tourist who confines himself entirely to cities and scenery, New South Wales offers no less wide a field. In the first place there is Sydney itself which little more than a hundred years ago consisted of a few small huts and houses dotted promiscuously about the slopes round a harbour. To-day the same town is one of the foremost of the British Empire, counting its population by the half million, with a business centre remarkable for its fine buildings, a harbour upon which float some of the largest ships in the world, and environs whose well kept streets and neat suburban villas occupy the places where not so very long ago the aboriginal had his camp and the kangaroo and emu roamed undisturbed. Though surpassed in rapidity of construction by the other Australian towns such as Melbourne, Sydney's growth in her lifetime has been stupendous, and, with the records of the early days before him, the tourist can but admire the way in which she has pushed to the front through the many difficulties in her path. Round about are places such as Windsor, Richmond and (further away) Bathurst and Port Macquarie which have an historic interest as being among the first towns in Australia beyond the limits of the Port Jackson penitentiary. Within half a day's journey from Sydney are the Blue Mountains, presenting in the valleys and gorges of their seaward face some of the grandest and most impressive scenery of the world, while in the North and South Coast districts occur some admirable beauty spots which combine

the mountain grandeur with the vivid green of a tropical vegetation. For coastal scenery there are the harbours of Port Jackson and Broken Bay, both with exceptionally beautiful surroundings, and a very fair idea of interior conditions may be gained by extending the Blue Mountain trip further to the westward.

In short there is much justice in the assertion that anyone who wishes to arrive at an estimation of Australia and the Australians has little need to go further afield than New South Wales and its capital. That there are aspects of life outside the State's boundaries which are distinctly different is of course a fact that it would be folly to deny, but for general information and a broad view of Australian scenery, no State offers such extensive opportunities. With the single exception of Victoria no State has so complete a railway system or such advantages for comfortable travelling, and even should the visitor stay closely by the railroad, viewing the country through the windows of his railway compartment and lodging for a few days at the towns en route on the different lines he will be enabled to form a fairly correct idea of the resources of the country, the manners and types of its inhabitants and the varying descriptions of scenery in which they exist.

AREA AND BOUNDARIES.

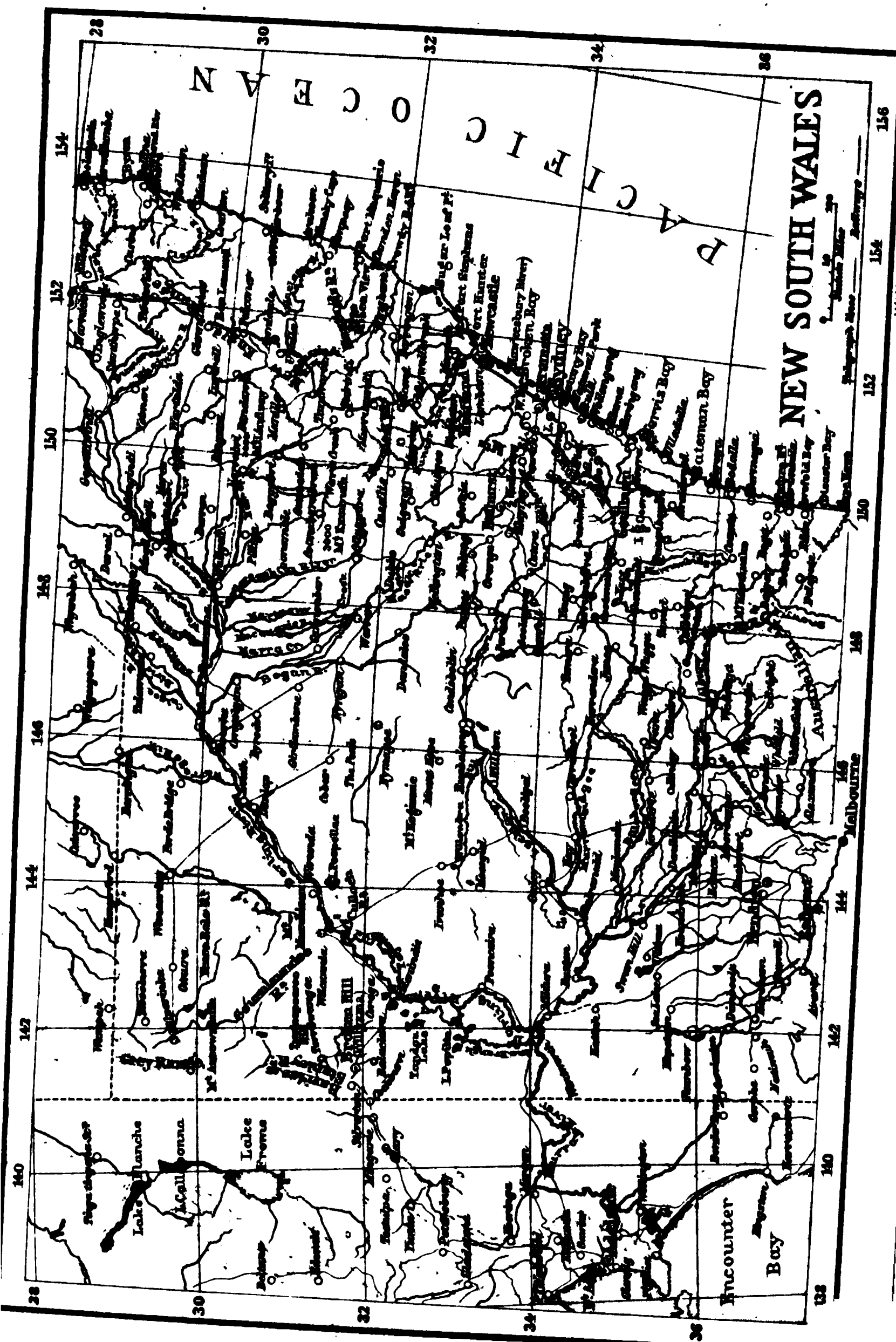
The area of New South Wales is estimated at 310,700 square miles or 198,848,000 acres. The length of the State from the extreme points to the north and south is 680 miles and the breadth from east to west is 760 miles. The greatest diagonal is 850 miles. New South Wales may be divided internally into three distinct regions: the coastal, from 30 to 150 miles in width embracing an area of 38,200 square miles, the tablelands from 120 to 290 miles wide measuring 84,900 square miles, and the Western plains covering 187,600 square miles. The State is bounded on the east by the Pacific Ocean and on the west by the line of the 141st meridian of east longitude from the point where the River Murray crosses it to the intersection of the 29th parallel of south latitude. At this point the northern boundary of the State commences, running along the 29th parallel till that line is crossed by the Macintyre River which follows to its junction with the Dumaresq. Thence it runs along the course of the latter river to a spur of the dividing range, along which it is drawn to the point where it joins the

main range. It follows the main range to Wilsons peak, where the Macpherson Range carries it to the seaboard at Point Danger. Southward, the course of the river Murray marks the division of the State and Victoria from the South Australian border at the junction of one of its tributaries the Indi. This stream then serves as the boundary to its source whence an imaginary line runs to Cape Howe.

PHYSICAL FEATURES.

As in climate so in configuration is New South Wales divided into three zones, all having distinctive features of their own differing greatly from each other and marked by well defined limits. Passing from east to west the first region is the coastal belt, which varies from 150 miles in breadth to a mere strip along the sea coast. It is much broken by spurs from the main range but towards the sea the land is generally speaking more level or undulating. It is traversed by numerous rivers, which have their source in the Main Dividing Range, and flow at first through mountainous country and later through rich alluvial land whereon a thriving agricultural and dairying population is settled. The principal of these rivers are (the drainage of each and its tributaries being given in parentheses):— The Richmond (2,400 square miles), the Clarence (8,000 square miles), the Macleay (4,000 square miles), Hastings (1,400 square miles), the Hunter (11,000 square miles), the Hawkesbury (8,000 square miles), the Shoalhaven (3,300 square miles) and part of the Snowy River (2,800 square miles). Several excellent harbours and ports diversify the coast line, chief among which are Port Jackson or Sydney Harbour, one of the finest natural harbours in the world, Port Hunter, Port Stephens, Broken Bay, Botany Bay, Byron Bay, Trial Bay, Jervis Bay, Bateman's Bay and Twofold Bay, all affording excellent anchorage. Politically Norfolk Island and Lord Howe Island belong to New South Wales, but they cannot be said to do so geographically speaking, and the coastal islands are insignificant in extent. The second region of the three into which New South Wales is divided consists entirely of the Main Dividing Range and the tablelands which stretch along its summit. The chain extends from north to south through the whole State, running for the most part parallel with the coast and sometimes approaching it very closely. To the east the range is very precipitous, rising abruptly from the coastal belt to a height of from 2,000 to 3,000 feet, while in the south eastern corner of the

State the highest peaks of Australia are to be found in Mount Kosciusko and Mount Townsend, each having an altitude of over 7,000 feet. The ruggedness of the mountains is especially noticeable about the Snowy River and New England districts, while the Blue Mountains are famous throughout Australia for the grandeur of their scenery. The loftiest point of this range attains in Mount Beemarang a height of 4,100 feet. The Dividing Range is everywhere broken by narrow valleys and deep gorges, and in places offshoots and spurs increase the width of the really mountainous country to a considerable extent. Westward of the dividing range conditions are again totally distinct, and with hardly an elevation to break its continuity the land slopes gradually to the centre of Australia. The whole of this vast plain is drained by a river system which eventually joins that of the Murray. A few such rivers as some of the tributaries of the Darling, flow into the State from Queensland, the chief of them being the Mooni, Culgoa, Warrego and Paroo. The Darling itself rises under the name of the Dumaresq in the extreme north eastern corner of the State, and as the Macintyre, Barwon, and finally as the Darling flows diagonally across the whole of New South Wales, eventually emptying itself into the Murray at Wentworth. In addition to those already mentioned, its tributaries include the Guoydir, Namoi, Castlereagh and Macquarie. In normal seasons the river is navigable for shallow draft boats to Walgett 1,758 miles from its junction with the Murray. The Murrumbidgee, another affluent of the Murray, rises in the Coolamon Plains in the south west and joins the main river after a course of 1,350 miles. In the upper part of its course it receives many small mountain streams, but its principal tributary is the Lachlan, rising in the main dividing range and flowing through 700 miles of a course before its junction. But the principal river of the State and indeed of Australia is the Murray which forms its southernmost boundary. Its sources are in the Snowy Mountains, and until Albury is reached 1,439 miles from sea, the character of the main stream and its tributaries is chiefly of the mountain torrent order. Past that town however the stream flows more quietly, gaining rapidly in volume and fed by many tributaries on both sides throughout its entire length. The river has a total length of 1,719 miles and is navigable to a point about 150 miles above Albury. On the Western border of the State is another small mountain system, the Barrier and Grey Ranges being the best defined portions of it. At no part does it rise above 2,000 feet in height.



NEW SOUTH WALES

With Jöntzen, Bremen.

CLIMATE.

There are three distinct climatic belts in New South Wales — the coast, the tableland, and the interior plains. On the coast, the climate is generally speaking very equable, the mean temperature of summer and winter having a difference of only 20 degrees. In the northern districts the summer is a hot one, though not oppressively so, and the average temperature does not exceed 78 F., a figure which declines gradually until an average of 67 is reached in the south. In the winter the averages are 59 and 52 respectively. On the tableland most salubrious conditions are experienced. Cooma in the south has a mean summer temperature of 65.4 and a mean winter temperature of 41.4, while in the New England districts to the north the figures are 67.7 and 44.4 with a yearly average of 56.5. The climate is a most bracing and healthy one and the district has become a favourite health resort, persons suffering from pulmonary and other ailments finding much relief there. Where the land rises in the south to the altitude of the Australian Alps the weather is of course much colder, and at Kiandra and other places the winter is usually marked by heavy falls of snow. Indeed during the summer of 1902—3 weather conditions were so unique that a snowstorm visited the south eastern highlands and did much damage to stock, although on the plains at the same time temperatures were at the usual summer level. In the interior the extremes between heat and cold are of course much more marked, but the dryness of the atmosphere admittedly renders the climate a very healthy one. Temperatures at stations in the interior are sometimes very high, occasionally ranging between 110 and 120, but these hot days are not persistent, and the winter climate is peculiarly exhilarating.

As regards rainfall, the same distinctions are observable as in the case of the climate. On the coast the yearly average is a high one, an annual fall of between 60 inches and 70 inches being the normal of the northern coasts, and in some parts of the extreme south-east. Sydney, situated midway between the northern and southern boundaries, has a mean annual average of about 50 inches. On the tableland, the fall averages about 32 inches in a normal season, and these figures show a gradual drop as the more inland stations are approached, until on the western border, in the heart of the continent, averages between 14 inches, and 20 inches are all that are registered in the country adjacent to and west of the Darling. For the whole area of the western division the average rainfall does not exceed 19.80 inches.

POPULATION AND VITAL STATISTICS.

On June 30th 1904 the population of New South Wales numbered 1,441,441. At the census enumeration of March 31st 1901, the population of the State, exclusive of aborigines, was 1,354,846 (males 710,005 and females 644,841), the component parts of which were as follows:—

Natives of Commonwealth States	1,079,154
New Zealand	10,859
United Kingdom	220,401
Other British Possessions	5,953
German Empire	8,716
France and Possessions	2,129
Russia	1,262
Austria	667
Switzerland	454
Denmark and Possessions	1,368
Sweden and Norway	3,190
Italy	1,577
Other European Countries etc. . . .	1,910
United States of America	3,130
Chinese Empire	9,993
Other Foreign Countries	948
Born at Sea	1,967
Unspecified	1,438
Total	<u>1,354,846</u>

There were only 4,287 full blooded aborigines and nomadic half castes and 3,147 civilised half castes in the State at the date of enumeration, giving a total of 7,434.

The number of births in New South Wales during 1903 was 35,966, giving an approximate rate of 25.28 per thousand of the population, the rate for 1901 being compiled at 27.60. The deaths totalled 16,494, giving a rate approximately of 11.59 as against 11.68 for 1901. The rates compare very favourably with those of European countries.

Taking the usually accepted classification of causes of death the number of deaths in New South Wales during 1901 (later figures are not available) were subdivided as follows:—

Specific febrile or zymotic diseases	1,677
Parasitic	60
Dietetic	159
Constitutional	2,332
Developmental	1,708
Local	7,234
Violence	1,226
Ill defined	722
Total	<u>15,118</u>

The marriage rate per thousand was for 1901, 7.68.

CONSTITUTION.

The composition of the State legislature corresponds closely to that of the Commonwealth already described, consisting of the Governor, and two houses of Parliament. The Executive Council comprises seven salaried ministers and two without portfolios. The Upper House is a nominee chamber, members being appointed for life, the minimum being twenty one. The Legislative Assembly is elective the constituencies, being single, totalling 125. The suffrage is practically an adult one the franchise having been extended to women in 1902. No property qualification is required for the right to vote. Votes cast at the last elections for the House of Representatives numbered 282,514 out of a total of 578,017 electors on the roll in contested electorates.

GOVERNORS OF NEW SOUTH WALES.

- 1788—1792 Captain Athur Phillip R. N.
Lieutenant Governors:— Major F. Grose
1792—1794, Captain Paterson 1794—1795.
- 1795—1800 Captain John Hunter R. R.
- 1800—1806 Captain Philip Gidley King R. N.
- 1806—1808 Captain William Bligh R. N.
Lieutenant Governors:— Major Johnston,
Lieut. Col. Foveaux and Col. Paterson, from
1808—1810.
- 1810—1821 Major General Lachlan Macquarie.
- 1821—1825 Major General Sir Thomas Brisbane.
Lieutenant Governor, Colonel Stewart 1825.
- 1825—1831 General Sir Ralph Darling.
Lieutenant Governor, Colonel Lindesay 1831.
- 1831—1837 Major General Sir Richard Bourke.
Lieutenant Governor, Lieut. Col. Snodgrass
1838.
- 1838—1846 Sir George Gipps.
Lieutenant Governor, Lieut. General Sir
Maurice Charles O'Connell 1846.
- 1846—1855 Sir Charles Augustus Fitzroy.
- 1855—1861 Sir William Thomas Denison.
Lieutenant Governor, Lieut. Colonel Kemp
1861.
- 1861—1867 Sir John Young.
Lieutenant Governor, Sir Trevor Chute
1867—68.
- 1868—1872 Lord Belmore.
Lieutenant Governor, Sir Alf. Stephen 1872.

1872—1879	Sir Hercules G. R. Robinson. Lieutenant Governor, Sir A. Stephen 1879.
1879—1885	Lord Loftus. Lieutenant Governor, Sir A. Stephen 1885.
1885—1890	Lord Carrington. Lieutenant Governor, Sir A. Stephen 1890—91.
1891—1893	Lord Jersey. Lieutenant Governor, Sir F. M. Darley 1893.
1893—1895	Sir Robert W. Duff. Lieutenant Governor, Sir F. M. Darley 1895.
1895—1899	Viscount Hampden. Lieutenant Governor, Sir F. M. Darley 1899.
1899—1901	Earl Beauchamp. Lieutenant Governor, Sir F. M. Darley 1901—02.
1902	Sir Harry Holdsworth Rawson (Vice Admiral). Still in Office (1906).

QUARANTINE.

Although the Commonwealth Constitution Act empowered the Federal Government to take over the control of quarantine for the whole of the continent, and pass laws and make regulations accordingly, nothing has so far been done, and the States still administer the matter according to their several laws. Australians generally are very jealous of their health, and every effort is made to guard against the introduction of infectious and contagious diseases from any part of the world, while at the same time the appearance of any such disease in the States is met by energetic measures directed against its spread and towards its prevention. The Board of Health at present have full control over all matters relating to sanitation and health, and are invested with authority to place in quarantine any vessel should they deem it advisable. In addition they can make such arrangements for the fumigation of vessels and the precautions to be taken in the shipment or discharge of cargo as they think will meet the case. Should it be found necessary to quarantine persons, they are isolated at the quarantine station inside the North Head of Port Jackson. The site is an admirable one for such a purpose. Not only does New South Wales exercise extreme care in the case of individuals but also in the case of stock and live animals imported into the State from oversea countries. In Sydney Harbour there are two quarantine stations for foreign live stock, one at Bradley's Head and the other on

Shark Island. Here horses, cattle, dogs and other animals are kept for a considerable period so as to obviate any danger of their introducing disease, and no animal is allowed to land until it has been through that period of isolation. Heavy penalties are inflicted for any breach of the regulations, and the authorities are always on the alert to prevent any animal entering the State without having passed through the quarantine stations. It is not even permissible for Australian stock to come into the State without some degree of supervision, and for a long time the northern boundary was closely guarded against stock from Queensland entering, owing to the tick plague which was so virulent there a few years ago.

EDUCATION.

In common with the other Australian communities, primary education in New South Wales is largely under the control of the State, while the same authority exercises a good deal of supervision over the conduct of secondary education also. The statutory school age is from 6 to 14 years in each, and primary school education is compulsory, secular and free to those who cannot afford to pay. Ministers of religion are afforded opportunities of imparting religious instruction to children of their particular denomination. A number of superior and high schools, entirely supported by the State and numerous privately conducted grammar schools, colleges and denominational schools provide facilities for a sound secondary education which may be finished at the Sydney University, either in an Arts course or in the Medical, Science, Law or Engineering Faculties. There is also in existence an excellent system of technical education in operation, with a splendidly equipped and manned College and Museum in Sydney, and branch institutions and classes throughout the State. About 10,000 individual students yearly avail themselves of the advantages thus offered and the Educational authorities are at the present time making strenuous efforts to extend the sphere of usefulness in this direction. At the close of 1903 there were 2,862 State schools in New South Wales, with an aggregate teaching staff of 5,454, a scholars' enrolment of 213,318 and a average attendance of 154,382. In addition there were 841 private schools, with a staff of 3,368, an enrolment of 58,258 and an average attendance of 46,982. The number of students attending lectures at the University in the same year had increased from 657 in 1901 to 777. The cost to the State

of these educational methods is heavy, amounting to about three quarters of a million sterling altogether, but the taxpayer does not begrudge the money, and has the satisfaction of knowing that his State is one of the best educated in the world.

RELIGION.

There is no State religion in New South Wales in the sense of any creed being officially recognised or receiving aid from the public purse. The adherents of the Church of England are numerically strongest, its doctrines being professed by nearly half the population. There are six Church of England dioceses in the State, and the Archbishop of Sydney is Metropolitan of New South Wales, and nominally, Primate of the Commonwealth. Approximately there are 800 churches of this faith in the State, and some of the sees have been liberally endowed by private benefactors. The Roman Catholic is second in importance, comprising an Archdiocese and six Dioceses, the Archbishop of Sydney being also Cardinal. In New South Wales the Wesleyans are third in their numerical importance and the Presbyterians fourth; other Christian denominations worth mentioning are the Congregationalists and the Baptists. The Hebrew religion had, at the census enumeration of 1901 a total of 6,447 adherents, and other non-Christian creeds accounted for 37,729. The percentage to the population for the different religions at the same census (1901) was as follows:— Church of England 46.6; Roman Catholic 26.0; Presbyterians 9.9; Wesleyan Methodists 10.3; Congregationalists 1.9; Baptists 1.2; Hebrew 0.5; All other 3.6.

FINANCE.

For the year ending 30th June 1904 (the terminal date of the financial year), the revenue of New South Wales was £11,248,328, and the expenditure for the same period was £11,319,887. The principal heads of revenue in the State are Federal Refunds from Customs and other duties and tax services, Land Tax, Income Tax, Railway and Tramway receipts, Land revenue, Water and Sewerage receipts, Harbour Trust receipts, Stamps and Licenses. The expenditure is entailed by the General expenses of Government, the maintenance of Law and Order,

the administration of Public Lands, Education, Railways and other public works.

During 1904 thirteen banks had offices open in New South Wales for the despatch of business. Some of these extended their operations beyond the State and others had their head offices elsewhere. A list of the banks of New South Wales will be found on a subsequent page, included in the information concerning Sydney. During 1903 the aggregate clearings through the Sydney Banks' Pool amounted to £180,961,406. Eleven out of the banks have a note issue of their own, the notes in circulation at the end of the June 1904 amounting in value to £1,344,822. For the same date the liabilities of the banks in current accounts and deposits at interest totalled £34,768,363, and the assets (coin and bullion, £6,966,107, advances, property etc., £35,639,869) £42,605,976. Besides the banks of issue there are both State and trustee institutions for the receipt of savings, the principal of which are the two Government controlled banks — the Post Office Savings Bank and the Savings Bank of New South Wales. The amount on deposit in the various banks is very large in New South Wales, giving in 1904 an average for banks of issue and savings banks combined of £31.9.3 per head of population, which exceeds the figures for any State except Victoria, where the average deposit amounts to £34.12.8.

There are eighteen companies doing ordinary and industrial life assurance business in New South Wales of which six have their head office in New South Wales, six in Victoria, one each in England, South Australia, and New Zealand, and three in the United States of America. The A. M. P. is the most popular Australian Life Insurance Co., and the one that has paid the biggest dividends.

The financial crisis of 1893 was naturally the cause of an abnormal number of bankruptcies in New South Wales, but since that date there has been a very decided improvement in the commercial stability of the community. Despite the effects of the disastrous drought which were very severely felt all over the State, the number of bankruptcies in the State for 1902 only amounted to 485, the liabilities amounting to £281,204, and the assets to £124,427. The figures are greater than those of the previous eleven months, but less than those for any other year of the last decade.

The year 1903 shows a further improvement, only 463 bankruptcies being recorded with a total deficiency of £107,392.

COMMERCE AND SHIPPING.

The principal port of New South Wales is the capital, Sydney, the unexampled harbour facilities of which make it, in the accommodation offered to shipping, far superior to any other seaport of Australia. A very large shipping trade is done there, and the city is rapidly becoming the distributing centre for the entire Commonwealth. The only other port of any significance is Newcastle from which the great coal export trade is done and which, as regards the number of vessels entered and cleared there during the year, approaches closely to Sydney, though of course the tonnage of the ships visiting the latter is much more than that of those trading to the former. The bulk of New South Wales' external trade is carried on with the United Kingdom, but of recent years important and continually expanding commercial relations have been established with other countries, particularly Germany, France, the United States, Canada, and the East (China and Japan). In 1902 the total trade of New South Wales (including the interstate trade) was £ 49,518,261, but the returns for 1903 show an increase of roughly four millions, the total value amounting to £ 53,508,280.

The principal imports into New South Wales are detailed as, Apparel and Drapery, Drugs and Chemicals, Gold (uncoined), Hardware, Machinery, Oilmen's stores, Produce, Sugar, Stationery and Books. The total value of the imports (including gold and bullion of which some is re-exported) for 1902 was £ 25,974,210. Of this total £ 10,949,675 came from other States of the Commonwealth, £ 8,572,370 from the United Kingdom, £ 1,195,483 from New Zealand, and £ 799,418 from other British Possessions, giving a total of £ 21,510,946 from all British countries. Of the value of imports from foreign countries (£ 4,457,264) the United States are represented by £ 2,105,327 and Germany by £ 947,612, none of the many others exporting to New South Wales even approaching these figures.

For the year 1903 the total value of imports was £ 26,770,169.

The principal exports from New South Wales are, Wool, Meats (frozen and preserved), Wheat, Skins and Hides, Tallow, Coal, Gold (coined and uncoined), Leather, Silver and Silver Lead Bullion, and Butter. Of these the products of the pastoral industry such as wool, frozen and preserved meats, skins and hides, etc., are by far the most important, while metals and minerals rank next

in order of value. The total value of all exports from New South Wales for 1902 including coin and bullion (£ 3,680,681) was £ 23,544,051. The principal receivers of these exports were:— Other Commonwealth States £ 7,568,922, United Kingdom £ 7,102,596, United States £ 2,092,495, France £ 1,637,237, Germany £ 1,333,652, British Possessions £ 1,325,917.

For the year 1903 the export was valued at £ 26,738,111 showing a substantial increase on the preceeding year.

During 1902, a total of 2,093 vessels (sail and steam) were entered at Sydney with an aggregate tonnage of 5,323,430. Of these 1,225 came from other Commonwealth States, 210 from New Zealand, 194 from the United Kingdom, 60 from South Africa, 101 from America, 51 from Germany, 54 from France, and 71 from the South Seas. These ships carried crews totalling 106,700 persons and the passengers arriving by them numbered 81,060. For the same period 1,508 ships entered and 1,476 cleared at Newcastle, the aggregate tonnage being respectively 2,137,087 and 2,099,098.

During 1903 the total tonnage of vessels entered and cleared from New South Wales ports exceeded nine millions, of which total interstate shipping was responsible for nearly half.

MINING.

Most minerals occurring in Australia are also found and mined for in New South Wales, and the State, according to T. A. Coghlan (Govt. Statistician), is only second to Victoria in its total production since the beginning of the mining industry. The total value of metals and minerals produced in State until the end of 1903, in which year the output was £ 5,912,612, amounted to £ 148,745,053.

The value of mashinery, exclusive of coal and shale mines and the various smelting and refining plants, has been estimated at about £ 2,500,000, and the number of men engaged in the mining industry in the year under review was 37,559.

Coal is by far the most important factor in the mineral production of the State, and more than two thirds of all coal raised in Australia and New Zealand is produced here. The total carboniferous area of the State is estimated at 23,950 square miles, the chief mining centres being in the order named, the Newcastle, Illawarra and Western districts. There are about a hundred mines in operation, giving

employment to nearly 14,000 persons. The production of coal during the year 1903 was 6,354,846 tons, valued at £ 2,319,660.

Kerosene shale is found in some parts of the Blue Mountains, the production for 1903 being 34,776 tons.

Silver and silver lead comes next in order of value, the total output for the same year amounting to £ 1,501,403. The principal fields are Broken Hill, and Silverton in the Barrier district.

As a gold producer New South Wales ranks fourth on the list among the States of the Commonwealth, with an output for 1903 of 254,260 oz. fine, valued at £ 1,080,029, the total production until the end of that year being estimated at over £ 51,000,000. The following are the chief mining centres, with the yield for 1902 in parentheses: Cobar (26,956 oz.), Wyalong (20,718 oz.), Adelong (14,414). During 1903 the Cobar district proved to be by far the greatest producer of gold in the State, its output of 79,860 oz. amounting to nearly a quarter of the total yield.

Dredging operations were carried on during 1903 by 41 plants, the total area worked or applied for exceeding 9,000 acres. 27,237 oz. of gold were obtained during the year by this mode of mining.

Copper also forms a considerable item in the mineral output of the State, the production for 1903 being valued at £ 446,286, and the total quantity raised up to the end of that year at £ 6,611,165. The principal mine is the Great Cobar Mine, in the district already referred to.

Tin is principally mined in the New England districts, but is also obtained at Broken Hill and other western portions of New South Wales. The total production until the end of 1903 was valued at £ 6,817,122, and that of the year itself at £ 155,723.

Extensive deposits of iron ores are known to exist in various parts of the State, but as little has so far been done to their development, the annual output is comparatively small, 22,120 tons, valued at £ 15,834, being the production during the year 1903. The only iron works in the State are those of the Eskbank Iron Company at Lithgow Valley in the Blue Mountains.

The value of other minerals raised during 1903 was:—Antimony, £ 135; Platinum, £ 1,001; Bismuth (exported), £ 9,537; Chrome, £ 7,342; Cobalt and Nickel (exported), £ 1,570; Tungsten (exported), £ 608; Alum (exported), £ 6,212. Mercury, various kinds of marble, Limestone etc. further swell the list of the mineral production.

Among the gemstones found in the State, only diamonds and opals have been systematically searched for, and it is especially the latter stone, that has so far received the most attention. In 1903 over 1,100 men were engaged in opal mining at White Cliffs near Wilcannia, where the stone occurs to perfection; and the yield, estimated at £ 100,000 for that year, may be taken as a fairly correct average, though £ 140,000 was the value of output for the preceeding year. Diamonds are found at Bingara, in the New England district and at Boggy Camp, Copeton, and in 1903 stones to the value of £ 9,987 were produced.

Emeralds have also been mined for near Glen Innes, and other gemstones have been found in river gravel of various localities.

AGRICULTURE.

In agriculture New South Wales, though an older colony, has not made so close a study of its development as Victoria, though of late years the progress made has been more marked. For the season 1901—02 the total value of the crops was estimated at £ 6,687,000 as against the £ 8,625,000 of Victoria, a smaller State with a subsequent smaller area available for agricultural operations, and in 1903 — the best agricultural season yet recorded — New South Wales, with a production of £ 8,359,000, still remained nearly £ 2,000,000 behind its Southern rival. After hay (oaten, wheaten, and lucerne), the principal crop of New South Wales is wheat, the Riverina lands having been found especially suitable for the growth of this cereal, although there is always a danger, as in 1902, of a dry season destroying all chance of a harvest. Normally the State is capable of supplying its own requirements in wheat with an exportable balance, the increase in production having been most marked during the last few years. Oats, maize, barley, and other grain crops are also cultivated. Other agricultural crops grown are potatoes, onions, and many vegetables. The cultivation of the vine is receiving increased attention now that Australian wines have found a market in the Old World. In the North Coast districts of the State the sugar cane finds a suitable soil and climate for its growth, but the production of sugar is not a particularly great one and the industry has not the opportunity for expansion such as afforded in Queensland. Fruits of many descriptions are

also grown, though much more might be done in this direction, the State not having yet reached a basis of producing sufficient for local requirements, although the soil and climate offer many facilities for it to do so.

PASTORAL INDUSTRY.

Despite all competition, the pastoral industry of New South Wales has remained its most important wealth producer. The breeding of both sheep and cattle is followed extensively, but it is in the former that New South Wales especially excels, the fertile plains of the interior affording pasturage for abundant flocks of the merino sheep, which is the breed most favoured. At the end of 1903 it was estimated that there were 28,656,501 sheep in the State — a little more than half the sheep in the Commonwealth — and this total had been much reduced from that of former years by the operations of one of the most disastrous droughts that has ever visited the eastern side of the continent. The number of cattle depastured has also shown a marked decrease of recent years, the total for 1903 being 1,880,578, as compared with 2,047,454 in 1901. Cattle farming on the whole, receives little attention in the State, pastoralists finding sheep and their products, more profitable. Even now the stock carrying capacity of New South Wales has certainly not been tested to the full. Nearly all the wool which forms the principal pastoral product of New South Wales is exported, very little passing into local consumption. The value of the wool exported from New South Wales in excess over imports during 1903 was £8,522,999, and this showed a substantial decrease on the figures of the preceding year, a circumstance due entirely to the ravages of the drought.

The second in importance of the secondary industries in connection with pastoral produce is the export trade in frozen and preserved meats, which, though of comparatively recent date, has assumed very large proportions. Though in actual totals Queensland is ahead of New South Wales, the superiority is due to the excess of frozen beef exported from the former, the latter State shipping away more frozen mutton than any other State of the Commonwealth. Great efforts have been made to expand the trade, and markets have been found both in the East and in South Africa, which have given a profitable return. Naturally there are several chilling and freezing works established for the purpose of dealing with this product, the total capacity of which has

**DAIRY FARMING IN THE ILLAWARRA DISTRICT
NEW SOUTH WALES.**

been estimated as follow:— Chilling Works, 488,500 head of cattle or 2,422,000 sheep; Freezing Works, 76,500 cattle or 3,150,000 sheep; Meat Preserving Works 183,000 cattle or 5,445,000 sheep.

The dairying industry has of late years made great strides in New South Wales, and farmers have begun to realise that there is considerable profit in it and in its concomitant pig-raising. Its success is attributable to the introduction of the central factory system for butter making and the establishment of creameries, on the cooperative principle or otherwise, in suitable localities. At these creameries the milk is collected from the farmers in the vicinity, separated, and the cream sent to the factory. The estimated value of dairy produce in 1903 was £ 2,027,000, that of pig farming produce £ 399,000.

MANUFACTORIES.

In the manufacturing industries of the State, no particular progress has been made of recent years, and the number of factories in 1903 viz. 3,476, employing 65,633 persons, show a slight increase in the number of establishments only, but a decrease in the number of hands employed.

The total number of manufactories in New South Wales employing 3 hands and over at the end of 1901 was 3,367. Of these, 73 factories employed over a hundred hands divided as follows:— over 500, four; over 400, one; over 300, four; over 200, sixteen; over 150, ten; over 100, thirty eight. There were 1,415 factories in the Metropolitan District for that year, employing 42,320 hands (32,215 males, 10,005 females) out of the 66,230 factory hands in the State. The value of the material used during the year was £ 13,885,896, the wages paid amounted to £ 4,946,079 and the value of the goods manufactured or work done in the twelve months was estimated at £ 24,393,471.

The principal Industries were:—

Treating raw material, the product of pastoral pursuits.
256 establishments, 2,981 hands. Value of output
£ 1,190,256.

Working in wood. 430 establishments, 5,108. Value of
output £ 1,629,463.

Metal works and machinery. 301 establishments, 13,831 hands.
Value of output £ 5,606,180.

Connected with food and drink. 673 establishments, 11,372 hands. Value of output £ 8,659,501.

Clothing and textile fabrics. 538 establishments, 14,497 hands. Value of output £ 2,457,899.

Books, paper, printing. 298 establishments, 5,573 hands. Value of output £ 1,328,922.

SPORTING.

The sports followed in New South Wales are those usually practised in Great Britain. Horse racing, cricket, football, tennis, sailing, rowing, lacrosse, cycling, running, bowls, shooting, fishing and other outdoor pastimes all have their votaries in the appointed seasons, and each branch has connected with it several strong associations, both amateur and professional which are most enthusiastic in their organisation of competitions and the general preservation of the popularity of their particular section.

Horse Racing. The principal racecourses of New South Wales are as follow:— Randwick, the headquarters of the Australian Jockey Club, situated in a suburb of Sydney. It is oval in shape with a racing track of $1\frac{1}{3}$ miles long, the last quarter of a mile being straight. Several training tracks are also available. Rosehill, about 15 miles from Sydney, Moorefield, Canterbury Park and Warwick Farm. The principal races run during the year in New South Wales are the Derby ($1\frac{1}{2}$ miles), the Randwick Plate ($2\frac{1}{4}$ miles), the Metropolitan Stakes ($1\frac{1}{2}$ miles) and the Duff Memorial Stakes (1 mile) at the A. J. C. Spring meeting; The Villiers Stakes (6 furlongs) and the Summer Cup ($1\frac{3}{4}$ miles) at the A. J. C. Summer meeting; the Sydney Cup (2 miles), Champagne Stakes (6 furlongs), A. J. C. Plate (3 miles), St. Leger ($1\frac{3}{4}$ miles) at the A. J. C. autumn meeting; The Sydney Tattersall's Cup (2 miles) and The Carrington Stakes (6 furlongs) at meetings of Tattersall's Club; The Anniversary Handicap ($1\frac{1}{2}$ miles) at the January meeting of the Sydney Turf Club.

Aquatics. The controlling body in Aquatics is the New South Wales Sailing Council, the affiliated clubs being The Royal Sydney Yacht Club, Prince Alfred Yacht Club, Sydney Sailing Club, Sydney Canoe Club and others. The New South Wales Rowing Association takes charge of matters connected with rowing and there are 10 affiliated clubs. There is also a New South Wales Amateur Swimming Association with several clubs affiliated with it.

Cricket. The New South Wales Cricket Association has for its objects the management and promotion of the

general interests of the game in the State. Interstate and intercolonial matches are played under its auspices and a regular competition between several strong clubs is maintained throughout every cricket season. The headquarters of Cricket in Sydney is the Sydney Cricket Ground (Moore Park) which, both from a players and spectators point of view is surpassed by but few similar grounds in the whole world. Each of the clubs playing in the first grade has also a ground of its own, and indeed, every park and public reserve in the metropolis has one and sometimes several pitches in it.

Football. In the 'winter season football takes the place of cricket in the estimation of the public and very large crowds follow the fortunes of the various clubs. The New South Wales Rugby Union is the governing body, and interstate matches with Queensland are yearly, and with New Zealand occasionally played. Approximately nearly 300 clubs are playing under the Union Rules in New South Wales. The Metropolitan matches are controlled by the Metropolitan Rugby Union, a subsidiary branch of the New South Wales Union.

Tennis. Like football, tennis is a winter game and is yearly receiving a larger number of adherents.

Cycling. Both amateur and professional cyclists are very strong in New South Wales, and quite recently there has been a revival in the sport, several American and European Champions having visited the States in 1902—3. The Amateurs are cared for by the New South Wales Cyclists Union affiliated with which are several touring or other clubs, while the professionals are governed by the League of Wheelmen. Cycle racing is very popular in Australia and large crowds attend the meetings which are held both in the afternoons and evenings.

Athletics. The control of all matters connected with amateur footracing, walking, jumping or cognate sports is in the hands of the New South Wales Amateur Athletic Association under the rules of which all races are held.

Shooting and Fishing. Good shooting and fishing is obtainable in many parts of the State but there are no localities especially marked out for the former, and the acquaintance of an enthusiast in field sporting is necessary before setting out with gun and dog. In fishing on the contrary, this is hardly needed, and excellent sport can be obtained almost anywhere in the numerous bays which indent the coast and in the rivers which flow through the coastal belt.

PRISONS.

There are altogether 58 gaols in New South Wales, of which 8 are principal gaols, 15 minor gaols, and 35 police gaols. The eight principal gaols are Darlinghurst (Sydney) with 446 cells, Parramatta (433 cells), Goulburn (330 cells), Bathurst (321 cells), Maitland (172 cells), Trial Bay (133 cells), Berrima (106 cells), Biloela (19 cells, 10 dormitories). The gaol discipline of New South Wales is on a level with the latest approved systems in vogue in the Old World, and a recent innovation which has caused a marked improvement has been the introduction of the "restricted association" principle into all but two of the penitentiaries. For the detection of criminals a system akin to the French Bertillon system of measurements has been inaugurated and is working satisfactorily.

RAILWAYS.

With the exception of about 85 miles of privately owned road in the working year 1903—04 all the railways in New South Wales, amounting in length to 3,362 miles, are owned and controlled by the State, this mileage on a basis of population comparing very favourably with that of other countries in the world. The whole of the New South Wales railway systems has its terminal station in Sydney, except for a short isolated line running from Lismore to the Tweed, in the extreme north-eastern corner of the State. From Sydney three distinct systems travel out — the Southern, the Western, and the Northern. The Southern, the main line of which runs from Sydney to Albury where it connects with the Victorian system, is considered the most important and certainly serves the richest and most thickly populated portion of the State. Between Sydney and Albury (386 miles) on the Murray, numerous branch lines junction the trunk road. At Goulburn (134 miles) a line runs south to Cooma (264 miles) through a rich pastoral and dairying district. Leaving Goulburn, the line runs in a Westerly direction to Cootamundra (253 miles) where short feeders on either side join up Temora and Gundagai. At Junee (287 miles) a line branches off almost due West to Hay (454 miles) through the rich agricultural district of the Eastern Riverina which is further served by a southerly offshoot, midway to Finley. Leaving Junee, the main trunk road trends southward, throwing off short lines at The Rock (329 miles) to Lockhart and at Culcairn (356 miles) to Corowa, on the river Murray, where it again touches the Victorian system. In addition, the South coast line runs

HAWKESBURY RAILWAY BRIDGE
NEW SOUTH WALES.

from Sydney to Nowra (a mineral and dairying district). The Western line with its outward terminal at Bourke (503 miles) has also several branches. At Wallerawang (105 miles) just after crossing the Blue Mountains, a line runs north west to Mudgee (190 miles), and at Blayney (172 miles) a southerly branch connects with the Southern system at Murrumburrah. Further west still, at Orange (192 miles) a line runs due West to Condobolin (331 miles) with a feeder to Forbes (281 miles), while the main line trends away to the north west through typical pastoral country. At Nyngan the traffic from the important mining district of Cobar (459 miles) comes in, and at Byrock (456 miles) the last divergence to Brewarina takes place. The Northern system runs parallel to the coast as far as Newcastle (102 miles), the second town of the State, and then falls away to the north west through the important agricultural districts around Maitland, Singleton, and Murrundi. The first branch is at Werris Creek (254 miles) whence a line traverses country under pastoral occupation as far as Moree (412 miles) and Inverell. The Northern trunk road then takes a true northerly direction through the rich New England districts to Jennings where it junctions the Queensland system, thus enabling the traveller to pass from Adelaide to Brisbane, a distance of 1,808 miles on the railway. Indeed a longer journey even than that is possible, and a passenger may pass by train alone from Oodnadatta in South Australia to Cumnamulla in Queensland, giving a continuous 3,100 miles.

The cost of construction to the date of the last departmental report (June 30th 1904) was £42,288,517, while the total earnings for the twelve months ending on the same date amounted to £3,436,413, giving a net profit, after deducting working expenses, of £1,177,473 which represents a percentage of 2.78 on the capital expended. The goods tonnage carried during the year was 6,656,759, and the passengers journeys totalled 33,792,689. For this work the rolling stock employed consisted of 620 engines, 1,126 coaching vehicles and 11,505 goods vehicles. The passenger coaches are of various types. For the short distance suburban traffic they are seated on the American plan, that is to say with an aisle down the centre, the seats capable of accommodating two persons, and running transversely with adjustable swing backs. The ordinary long distance coach is divided into several compartments with seats running the whole width of the carriage. In the majority of this type a small space is utilised between each two compartments for toilet purposes, a door opening into it from each carriage.

Sleeping cars are attached to the Southern (Melbourne) express and to the Southern, Northern and Northwestern Mail trains. Tickets for sleeping berths may be booked in advance, the price being either 12/6 or 10/—, the latter in case of an upper berth. A vestibule train is run on the Southern express in which the American plan of connecting the coaches and providing a passage way down the length of the carriages, with doors opening into the compartments, has been adopted. Only two classes, first and second, are provided throughout, and the fares average about 2 d. per mile first class and 1 $\frac{1}{3}$ d. per mile second class, with considerable concessions in the case of return tickets. Cheaper rates still are charged on the special and holiday excursion trips, which the Railway Department are frequently running to different pleasure and health resorts, and of which full particulars are generally well advertised. By watching the daily press, especially during the summer months, the tourist may thus avail himself of many of these excursions which will materially reduce the expense of viewing the country. Furthermore certain tourist districts have been defined on the South coast, Western and Northern lines, to which holiday excursion tickets are issued daily. Ordinary return ticket are available for seven days from date of issue, between distances not exceeding 20 miles, or for 6 months from date of issue for distances exceeding 20 miles. Passengers holding ordinary tickets (not excursion) are allowed to break their forward or return journey subject to certain regulations. Special concessions are also granted to passengers from mail boats or other oversea steamers who are desirous of completing their journey by land, or of continuing it beyond the terminal port, on production of a certificate from the agent or purser of the ship. First class full fare passengers are allowed 156 lb., and second class full fare passengers 84 lb. weight of personal luggage free, all baggage in excess being charged at parcel rates. Half fare passengers are allowed half these weights. Holders of special cheap excursion tickets are entitled to 56 lb. of personal luggage for first class, and 42 lb. for second class. Luggage should be delivered 15 minutes before departure of train and a receipt or check obtained for it from the luggage clerk.

Books of reference. The Wealth and Progress of New South Wales (T. A. Coghlan); Official History of New South Wales (T. A. Richards); The Mother Colony of the Australias (F. Hutchinson); Year Book of Australia (Greville); Year Book of New South Wales (Greville); Australian Handbook; Official Guide to National Park, New South Wales Railway Guide; Dymock's Guide to Sydney; Samuel's Guide to Sydney.

SYDNEY.

Sydney, the most important city in Australia, incorporated on the 20th July 1842, is situated on the shores of Port Jackson in the County of Cumberland, 33° 51' 41" S. latitude, and 151° 11' 30" E. longitude.

The City, named after an English administrator of that period, was first founded as a convict settlement under Capt. Arthur Phillip in 1788, eight years after the discovery and landing of Captain Cook at Botany Bay. The transportation of convicts ceased in the early forties since when Sydney has made wonderful progress, and, aided by her natural advantages, has retained her pre-eminence over all other Australian towns.

There are now 113 miles of streets in Sydney, George and Pitt Streets, extending from Circular Quay, being the main arteries. The principal thoroughfares of the city are laid with native hardwood blocks, which make an excellent pavement.

Unlike the newer Australian towns which were systematically laid out, the streets of Sydney were the results of homesteads built along the tracks and bullock roads of the early settlers, curving in and out to avoid steep ascents; many of the streets, particularly in the neighbourhood of Flagstaff Hill, are narrow and irregular in consequence, which gives them an old world picturesqueness, quite lacking in the cities of more recent growth. The main business centre of the city may be said to be within $\frac{1}{2}$ a mile radius of Circular Quay, and new and splendid structures, the offices of banks, insurance offices, warehouses, and public buildings have replaced the old houses in the main streets.

Many public parks add to the attraction of the city, and for the tourist as well as for the invalid in search of health, there are numberless charming spots within easy reach of town to suit the different requirement of everyone, and indeed there are few cities than can boast of so many natural advantages as this Queen of the Southern hemisphere.

Area, Population etc. The main part of the city lies on the South side of the harbour, about 6 miles from the heads, while its suburbs extend to the ocean beach on the one hand and many miles inland on the other. The area of the city proper covers 2,880 acres, and its capital value of property is £44,777,760. The population in 1903 was 511,030, as compared with about 30,000 in 1841, comprising about a third of the whole population of New South Wales.

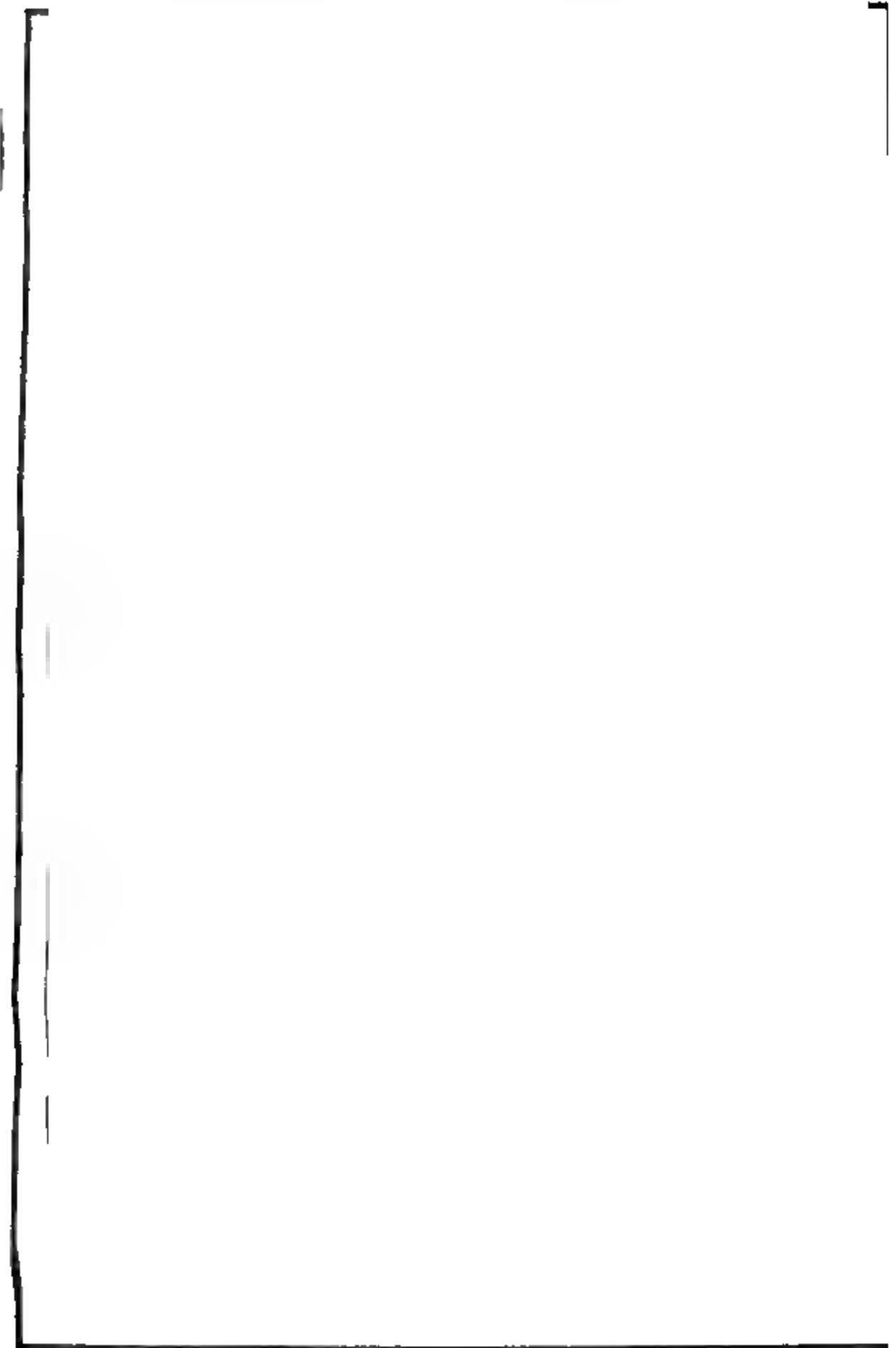
Streets. The principal streets of Sydney are George Street, wherein are located most of the chief retail establishments, Pitt, York, Clarence, Castlereagh, Elizabeth, and Macquarie Streets, running from the Circular Quay southward and, at right angles to them are Bridge, Hunter, Moore, King, Market, and Park Streets in that order from north to south. Double lines of tram rails are laid in George, Elizabeth, and King Streets, while a single line runs up Pitt Street from the Quay to the Redfern Railway station, the return journey being along a single line in Castlereagh Street.

Climate. Although statistically the average yearly temperature of Sydney is most equable, sudden changes are frequent during the summer months. The mean temperature of the year is 63 Fahr., that of the summer 70.8, the highest recorded temperature in the shade being 109 Fahr. The mean winter temperature is 53 Fahr., 36 Fahr. being the lowest on record. As all the coastal regions of New South Wales, Sydney has a good rainfall, 50 inches being the annual average during 42 years observation.

The Harbour. Two bold rocky headlands rising abruptly to a height of several hundred feet and lying about a mile apart, form the entrance to the harbour which bears the reputation of being the finest in the world, and which it would be indeed difficult to surpass anywhere, both for its natural beauty and for the facilities afforded to shipping. Vessels up to twenty seven feet draught can enter the harbour at dead low water with perfect safety, and once inside there is ample room to manoeuvre any vessel with ease, and a sufficient depth to permit the largest steamers to come to their mooring almost anywhere within a few feet of the shore. The harbour is navigable for seventeen miles inland, and affords an almost unlimited accommodation for shipping. Some idea of the size may be gained from the fact that its water frontage along the many coves and inlets inclusive of the Parramatta and Lane Cove rivers measures about 165 miles.

In the year 1901 Sydney Harbour was entered by 3,452 vessels with an aggregate tonnage of 4,196,408, as compared with 3,021 vessels of 2,821,898 tonnage in 1891, and 2,254 vessels of 1,456,239 tonnage in 1881, showing the steady increase of trade during the last twenty years. The returns for 1903 show a total 5,934,411 tons entered and cleared.

About a mile to the southward of the harbour mouth, Macquarie Lighthouse, with a brilliant revolving light visible at a radius of 21 miles, stands on an elevation of 350 feet; the Hornby Lighthouse (painted with red and



white stripes), a fixed light at an elevation of about 80 feet, marks the southern entrance of the port. Between the two is the Gap, where the illfated immigrant ship "Dunbar" was lost in 1857. On entering the heads, Port Jackson proper opens to view on the left, the first inlet under shelter of South Head being Watsons Bay, where oversea steamers come to an anchorage to await the medical officer. On the narrow strip of land separating the Northern cove, called North Harbour, from the sea, lies the township of Manly, a favourite seaside resort. Facing the entrance lie the rocky promontories of Middlehead and George's Head, both of which, like South Head and Bradleys Head, the next cape but one (Chowder Head) to the southward, are fortified with masked batteries. Middle Harbour, a deep and much serrated estuary, with an area of about 389 miles, stretches far inland to the north west of Middle Head.

On the south side, below Watsons Bay, lie the following bays and coves in the order named, Rose Bay, Double Bay, Rushcutters Bay, Elizabeth Bay, Woolloomooloo Bay, Farm Cove, Circular Quay or Sydney Cove, and Darling Harbour. On the north side after passing Bradleys head, Mosmans Bay, Neutral Bay and Lavender Bay are the principal indentations of the main harbour, and are much in favour as suburban residences. Of the several islands dotted about the harbour, Garden Island between Pott's Point and Mosmans Bay, is of some importance as being a station for Naval Stores. Steamers pass to the northward of this island. Fort Denison, built on a small rock, lies between Garden island and Kiribilli Point.

The distance (by sea) from Port Jackson to Melbourne is 567 miles, to Brisbane 503 miles.

Arrival. After satisfying the quarantine regulations at Watsons Bay, mail steamers on arrival in Sydney berth at Circular Quay, where passengers are landed. This is within a short walking distance from the heart of the town, and at the starting point of the main tram and ferry services. Cabs and carriers are also always in attendance.

Customs. The baggage is examined at the wharf sheds, most articles except those of personal apparel etc. being dutiable.

Railway Stations. The principal station of Sydney, at which practically all the suburban traffic of the metropolis as well as the long distance traffic of the State terminates, is at Redfern, and can be reached in about twelve minutes by electric tram from Circular Quay. At the present time

a large and more commodious railway terminus is in course of construction a little nearer the centre of the town. The North Shore line, which junctions the main Northern route at Hornsby, and is almost wholly a passenger carrying road, terminates at Milsons Point, from where the passengers are conveyed across the harbour in steam ferry boats.

Tramways. Like its railways, the tramways are Government property, and besides Newcastle, Sydney is the only town in the State furnished with this mode of transit; all the suburbs are now connected with the city by either electric or steam trams, the former predominating, and all the most important streets of the city are now traversed by them.

"The length of line upon was on June 30th 1904 125³/₄ miles, which had cost for construction and equipment £ 3,471,759. The receipts for the year were £ 802,985, the working expenses £ 673,625, leaving a profit of £ 129,360, or 3·73 per cent on the invested capital." (Coghlan.)

The uniform fare is a penny per section, no transfer tickets being granted. Trams stop in the city at every street corner, in the suburbs when required, and at the regular stopping places. They run from 5 a. m. until 11 p. m., exhibiting the name of their destination at their side and front. At night coloured lights serve as distinguishing signals. All night services have recently been instituted on several lines.

Omnibuses. Whatever parts of the city and suburbs are traversed by tramlines are usually well served by omnibuses, which in some instances run in direct competition with the cars. The sectional system of fares 1d., 2d., and 3d., is adopted on the majority of the lines, and an effort is made to attract custom by making the sections longer and the throughfares cheaper than those which prevail on the tramways. Buses run to Circular Quay from all parts down George or Pitt Streets, and the traffic, though not so great as it was a few years ago, is still considerable.

Cabs. The type of cab mostly in vogue in Sydney is the hansom, capable of accommodating two persons. The cab drivers are all licensed and are required by the traffic regulations to keep copies of the scale of fares in their vehicles to which reference can always be made by the passenger. Within the city boundary the fare is 1/— for every fifteen minutes up to an hour, and 9d. for every succeeding 15 minutes. The weight of luggage allowed to be carried free is 100 lb. with one passenger, or 50 lbs. with two passengers. Of late a few four wheelers also ply for hire.

Ferries. A seaport town like Sydney must necessarily be provided with ferry services, and those of the metropolis of New South Wales are most efficient. The principal among them start from Circular Quay for all points east of Milson's Point, and for the Parramatta and Lane Cove Rivers, and from the foot of King of Erskine Streets for the Western suburbs. The chief lines leaving Circular Quay: are — The North Shore (Milson's Point) every 10 minutes, McMahon's Point and Lavender Bay every quarter of an hour, Neutral Bay, Mosman's Bay (both a half hour and twenty minute service according to the time of day), Manly, and Watsons Bay on the East, and Parramatta and Lane Cove Rivers on the West. The ferry boats, especially those to the Milson's Point and the Northern suburbs, are commodious and comfortable, while included in the Manly line are among the best harbour steamers of any Australian port.

Hotels:— The principal hotels of Sydney are situated within a short distance of the centre of the city and are all easily accessible. Good accommodation can be procured at reasonable rates in many of them, the most popular hotels being: The Australia (from 12/6 per day), Pfahlerts (10/6), The Metropole (from 10/6), The Grosvenor (from 10/6), The Oxford (from 10/6), Aarons Exchange (from 9/—), the Wentworth Hotel, and Petty's. There are several other moderately good hotels where the rates are still less. At the Grand Central Hotel bedrooms can be secured on the European plan, a system which is also in vogue as an alternative at the Hotel Metropole, the charges for the former being from 2/6, and at the latter from 3/— per day.

Boarding Houses:— The most fashionable localities for boarding houses are at Pott's Point, from a quarter to half an hour's distance from the Post Office, and Macquarie Street, still nearer the centre of the city. "Hazeldean", at Wahroonga (altitude 600 feet), one of the most healthy suburbs on the North Shore line, to mention one of several good establishments in that district, can be recommended to visitors who prefer the attractions of a semi-country residence to a stay in town. The rates at such houses range from 35/— to £ 3.3.0 per week, but much more reasonable rates are charged elsewhere and accommodation can be obtained in the suburbs from as little as £ 1.1.0 per week.

Bars:— The usual hotel bar in Sydney consists merely of a counter, little attention being paid to the comfort of customers who are desirous of doing else than drinking. But of recent years some of the hotels have adopted the

Continental Lounge Bar system, and among the best and most comfortable of these are Pfahlert's, Power's (the Victoria Hotel), and the Australia. A uniform charge 6d. per drink is made, more expensive liquors being of course obtainable. It is advisable for the visitor to patronise only the best hotels, as in some of the lower class houses the wines and spirits are sometimes of an inferior quality. The counter lunches supplied free to customers are a feature of Australian bars.

Restaurants:— The restaurants of Sydney are very numerous and many of the hotels make a speciality of supplying meals to casual customers, the best hotels charging on the table d'hôte plan. The best restaurants, properly so called, are Paris House, Café Français, Victoria Grill Room, and Adam's Café. For good Continental cooking, Pfahlert's can be recommended. Except at the better hotels where the rates are between 3/— and 5/—, meals can be obtained at prices ranging from 1/— upwards. Some of the restaurants, such as Paris House and oyster shops remain open till late at night, and supper can be obtained there by theatre-goers. For light lunches and afternoon tea the most popular resorts are Shadler's, Sargents, the Fresh Food and Ice Company, and the A. B. C., where dinners are also served.

General Post Office. Situated some six minutes' walk from Circular Quay, between George and Pitt Streets, the General Post Office, one of the most conspicuous public buildings, may be said to constitute the city centre. The main facade presents a length of 353 feet to Martin Place, while the George and Pitt Street frontages are comparatively short. A collonade, supported by granite pillars, surrounds the building, and its clock tower, the loftiest in Sydney, from which a fine panorama of the surrounding country can be obtained, attains a height of 242 feet.

The money order office and savings bank are entered from Pitt Street, the Telegraph, Parcel, and Railway ticket offices from the George Street side of the building, which also encompasses the Telephone Exchange.

Tuesday is the principal mail day for Europe. The arrival of home mails at Freemantle are advertised by the display of the mailboat company's flag from the flagstaff on top of the tower, and the hoisting of a certain additional signal signifies that the mails are ready for delivery.

The post office is open daily, Sunday excepted, from 8 a. m. until 9 p. m. Saturdays from 9 a. m. to 1 p. m.

MOSMANS BAY, SYDNEY.

6
11
12
13
14
15

16
17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

The Town Hall. The Town Hall, a massive and ornate edifice of brown sandstone with a clocktower 189 feet in height, is situated at the corner of George and Drutt Streets, with a facade of 153 feet to George Street. Its main hall is of splendid proportions, seating 4,500 people. It is also remarkable for possessing the largest organ ever constructed. Popular organ recitals are generally held on Wednesday and Saturday nights. Admission 1/— and 6 d.

Queen Victoria Markets. Next to the Town Hall are the Queen Victoria Markets, one of the finest and largest buildings in the States, occupying the block between Drutt and Market Streets, with a frontage of 610 feet to George Street. An arcade 32 feet wide and 68 feet long traverses the whole length of the building. It was recently completed at a cost exceeding £ 252,000.

The University a splendid structure in the Gothic style of architecture is pleasantly situated on a elevation near Newtown Road, overlooking Victoria Park, its main frontage attaining a length of 410 feet.

The Institution was incorporated in 1850 with power to confer degrees in Arts, Law, and Medicine. Students are admitted irrespective of their religious creed or sex, and graduates from this seat of learning rank equally with those graduated at any University of the United Kingdom. Non-matriculated members may attend the lectures on payment of a comparatively small fee for the term. There are four affiliated Colleges, the Nonsectarian Womens College, St. Pauls (Church of E.), St. Andrews (Presbyt.), and St. Johns (R. C.), which latter three are controlled by their respective religious bodies. During a period extending over a number of years bequests to the extent of about £ 40,000 have been made to the University by various benefactors, which has therefore many scholarships at its disposal.

Other Buildings of Interest. In Macquarie Street, The House of Parliament, and old and unostentatious building; the Imperial Mint, admission to which may be obtained by applying for an order at the Colonial Secretary's department. The Sydney Hospital, a large and handsome structure between the Mint and Parliament House. The Public Library, opposite Domain entrance. Government House, a fine building of Elizabethan architecture, overlooks the harbour from an eminence in the inner Domain, between Macquarie Street and Farm Cove, entrance from Macquarie Street. The Colonial Secretary's Office and Works Department, a large building, occupies the block between Phillip and Macquarie Street.

Exchanges. The Royal Exchange of New South Wales is a fine substantial looking building at the corner of Pitt and Bridge Streets. A few years ago "high finance" was inaugurated there and meetings for transactions of this description occur several times during the week.

At the Sydney Stock Exchange, 113 Pitt Street, the stocks and shares of the ordinary market are dealt with at daily calls. Mining is of course the principal feature, mines from all over the continent receiving attention from the Sydney speculators, but banking, insurance, gas, brewery, steamer and other companies are also in request. The call list is a long one and the turnover for the year usually reaches very creditable figures.

The Sydney Wool Exchange is also in Pitt Street. Sales are held at frequent intervals throughout the season and for those in search of interest and amusement are worth attending. English, Continental, American, and local buyers are all represented.

The Sydney Chamber of Commerce is a powerful organisation of which all the principal merchants of New South Wales are members. It pays special attention to mercantile matters, and is usually of much assistance in the framing and administration of commercial legislation. Its headquarters are in the Royal Exchange Building at the corner of Pitt and Bridge Street.

The Chamber of Mines has an office at 113 Pitt Street in the Sydney Stock Exchange building.

The Builders Exchange is situated at 266 Pitt Street.

Factories. Most of the factories in and around Sydney are run on European and American lines and with the exception of such as are devoted to the preparation of pastoral products they offer nothing of particular interest. Of the latter the best known are:— The Sydney Meat Preserving Company, Parramatta Road Rookwood; the Rosewarne Packing Co., Chester Street Camperdown; New South Wales Canning factory, Rozella Bay Annandale, and the Riverstone Meat Company at Riverstone. Several boiling-down, wool scouring, and kindred establishments are in operation, but, practically the whole of the processes of secondary production in pastoral products may be seen at the Sydney Meat Preserving Co. or the Riverstone Meat Works. A reference of a streets' directory of Sydney will supply the addresses of any other factories that are working within reach of Sydney.

Banks. Banking hours are from 10 a.m. until 3 p.m.

The following are a list of banks doing business in the city:—

•

Bank of Australasia, 259 George Street. Australian Joint Stock Bank, George and King Streets. Bank of New South Wales, George and Wynyard Streets. Bank of New Zealand, George Street. City Bank, Pitt Streets. Commercial Banking Company of Sydney, George and Barrack Streets. Commercial Bank of Australia, 273 George Street. Comptoir National d'Escompte de Paris, 122 Pitt Street. English, Scottish and Australian Bank, George and King Streets. London Bank of Australia, George and Jamieson Streets. National Bank of Australasia, 60 Pitt Street. Union Bank of Australasia, Pitt and Hunter Streets.

There is also a Post Office Savings Bank in the General Post Office, and the Savings Bank at Barrack Street, besides agencies or other banking companies. Banking hours are from 10 a. m. until 3 p. m.

Consulates. Argentine Republic, Kent and Liverpool Streets. Austria-Hungary, 9 Bridge Street. Belgium, 335 a George Street. Brazil, Bridge Street. Chili, 24 Pitt Street. Denmark, 65 York Street. Ecuador, 163 King Street. France, 2 Bond Street. Germany, 9 Bridge Street. Greece, 12 Spring Street. Italy, 289 Elizabeth Street. Japan, Martin Place. Netherlands, Hunter Street. Peru, Bligh Street. Portugal, Pitt Street. Russia, Margaret Street. Spain, Moore Street. Sweden and Norway, —. Switzerland, 58 Margaret Street. United States of America, Martin Place.

Churches. There are upward of three hundred churches in Sydney and suburbs, the principal denominations represented being Church of England (76), Presbyterian (43), Roman Catholic (36), Australian Methodist (33), Congregationalist and Baptist. St. Andrews, the Church of England Cathedral, a massive building on the typical lines of a clerical edifice, is situated next to the Town Hall in George Street. The Roman Catholic Cathedral, St. Mary's, at the entrance to the domain, in design is one of the finest structures in the Southern Hemisphere. The general plan is on a stupendous scale and though fully equal to the present congregations has by no means been wholly completed. Other prominent churches within the metropolitan area are St. Phillips (C. of E.), St. Paul's (C. of E.), and St. Lukes (C. of E.); St. Benedicts, St. Patricks, St. Francis, and the Church of the Sacred Heart (all R. C.), Chalmers Church and the Scots Church (Presbyterian), the York Street Methodist Church and Wesley Church, Redfern (Methodist), Bathurst St. Congregational Church, Pitt Street Congregational Church, and the Great Synagogue, Elizabeth Street.

Hospitals. The Sydney Hospital, a handsome block of buildings in Macquarie Street between the Mint and Parliament House, and established in 1845, is the oldest hospital in Australasia.

The Moorcliff Ophthalmic branch of the Sydney Hospital is at Millers Point.

Prince Alfred Hospital, Missenden Road, Camperdown.

St. Vincent Hospital, Darlinghurst, under the care of the Sisters of Charity.

The Carrington Centennial Hospital. Home for Convalescents, Camden.

The Thomas Walker Convalescent Hospital, Parramatta River.

Coast Hospital for infectious diseases, Little Bay, 11 miles from Sydney.

Leprosy Lazaret in conjunction with Coast Hospital.

Childrens Hospital, Glebe Point.

Fire Brigades. The Metropolitan Fire Brigade has a strength falling little short of 150 men, distributed over 10 stations within the metropolitan area. The Head Station or "No. 1" is situated in Castlereagh Street, and the other are at George Street West, North Shore, Marrickville, Darlinghurst Road, Newtown, George Street North, Alexandria, Woollahra, Redfern, Paddington, Balmain, and Waterloo. All these stations are connected by telephone with each other and with the principal wharves and business premises. The plant consists of 10 steam fire engines, 17 manual power engines, telescope ladders, hose reels etc. In addition there are several volunteer fire companies located in the suburbs all of them in possession of hose and reel.

Police. A force of nearly 1,000 police are employed within the metropolitan districts in the preservation of law and order, and generally speaking the streets are efficiently patrolled night and day. Traffic is also controlled by the Police force, and a mounted contingent of troopers is available whenever any ceremonial processions etc., necessitate the clearing of the streets.

Gaols and Watchhouses. The principal gaol of the State is situated at Forbes Street, Darlinghurst, and permission to visit must be obtained from the authorities. Another gaol within the metropolitan area is at Biloela. Most of the police stations have cells attached for the incarceration of minor offenders such as "drunks and disorderlies" while awaiting trial.

2

100

The Press. There are two metropolitan morning dailies in Sydney — the "Sydney Morning Herald" and the "Daily Telegraph". The former is the oldest living paper in New South Wales, having been continuously issued since 1831. The "Daily Telegraph" is of much more recent date. Both command a large circulation in town and country, and wield considerable influence in the community. There are two evening papers, the "Evening News" and the "Star" whose circulations are mostly confined to the city and suburbs. The "Daily Commercial News" is a journal devoted entirely to the commercial and shipping interests. Of the journals issued weekly the principal are: "The Bulletin" a clever semi-political paper of great influence and much popularity, not only in New South Wales but throughout Australasia, the "Sydney Mail" and "Town and Country Journal" issued from the Sydney Morning Herald office and the Evening News office respectively. The two latter are also well illustrated, chiefly with local matter, and aim at a concise summary of the news of the week designed for country readers, including also several special features of interest to all sections. The Daily Telegraph Co. issues "The Worlds News", a penny weekly of the "Tit Bits" variety, which is very popular. There are two Sunday papers — "Sunday Times" and "Truth" and three weekly sporting journals — "The Referee", "The Sydney Sportsman" and "The Arrow". Besides the papers above enumerated there are many others issued weekly, fortnightly or monthly in a variety of interests, some of a comic tendency, others on social news, and others again on behalf of some particular trade.

PLACES OF INTEREST AND AMUSEMENT.

Theatre Royal, Castlereagh Street; Her Majesty's, Pitt Street; Criterion Theatre, Pitt Street; Palace Theatre, Pitt Street; The Tivoli Variety Theatre, Castlereagh Street; The Cyclorama, George Street W.; The Art Gallery, Domain; The Australian Museum, College Street; The Geological and Forestry Museum, Domain; The Technological Museum, Harris Street.

The Royal Art Society of New South Wales, 78 Pitt Street, in which has recently been incorporated the Society of Artists, holds its annual exhibition about September.

Musical Societies. The Liedertafel, with office at Tattersalls Chambers and a postal address, Box 286 G. P. O.; the Amateur Orchestral Society, and the Sydney Philharmonic Society, 82 Pitt Street.

Scientific Societies:— Royal Society of New South Wales, 5 Elizabeth Street; Linnean Society; Royal Geographical Society of Australasia, 18 Bridge Street; Royal Anthropological Society, Lincolns Inn Chambers, Elizabeth Street; British Medical Association (N. S. W. Branch), 121 Bathurst Street.

The National Art Gallery. The National Art Gallery of New South Wales, situated at the highest point of the domain within ten minutes' walk from the centre of the city, is a magnificent building of Grecian architecture which, though already affording space for a large collection of pictures, is still in course of construction. It contains besides some fine examples of sculpture, ceramics, and pottery etc., a splendid international collection of modern oil and water colour paintings, among which are the following:— No. 2, *The Snake Charmer*, by E. Dinét (French); No. 6, *The Defence of Rorke's Drift*, by A. de Neuville (French); No. 15, *The Battalion in Square*, by Julien le Blant (French); No. 8, *The First Born*, by Gaston la Touche (French); No. 28, *Ismenic*, by C. Landelle (French); No. 99, *Moonlight*, by L. Douzette (German); No. 77, *Desolation*, by Karl Heffner (German); No. 23, "*Wedded*", by Lord Leighton (British); No. 69, *Rising Mists*, by Peter Graham A. R. A. (British); No. 122, *The Queen of Sheba's Visit to King Solomon*, by Sir E. J. Poynter P. R. A. (British), and No. 12, *The Scoffers*, by Frank Brangwyn (British).

Among the paintings bearing the most typical character in the Australian court, the sunny landscapes of A. Streeton, the Aboriginal heads of B. E. Minns, and Mahony's animated groups of station life stand out prominently, besides which some of the following works are among the most notable:— *Mignon* (a portrait), by K. I. Longstaff, No. 293. *Across the Black Soil Plains*, by G. W. Lambert, No. 249. *The Ever Restless Sea*, by W. Lister Lister, No. 253. *Mount Kosciusko*, by W. C. Piguenit, and *The Lady in Black*, by E. Phillips Fox.

The Australian Museum. Occupying the central block of College Street with a 200 feet frontage to Hyde Park, stands the Australian Museum, a massive sandstone structure of Graeco-Roman style of architecture. The Museum, which is a Government institution managed by a board of trustees, was founded in 1836, has now grown to the present important proportions and contains many rare treasures of natural history. The Australian fauna is particularly well represented, the collection of Australian birds including every known specie.

Remarkable among the Australian fossils are parts of an extinct herbivorous marsupial possessing the bulk of a large Rhinoceros, with great tusks protruding from a skull nearly three feet in length. Among other sections too numerous to mention, the institution embraces a remarkably fine collection of South Sea island curios, and some interesting relics of Captain Cook, whose statue in Hyde Park faces the main entrance of the Museum. These relics include his private journal in the voyage of the "Endeavour".

On the first floor some splendidly executed plaster casts of Australian snakes deserve special attention.

The Museum is open daily from 10 a. m. to 5 p. m., Sundays from 2 p. m. to 5 p. m. Admission free.

The Geological Museum, a temporary iron building in the Domain near Macquarie Street entrance, containing a collection of minerals, fossil remains, geological maps and photographs, is under the supervision of the Mines Department. Casts of the various large nuggets found in the Colony are on view here, among which the "Welcome Stranger", the largest nugget ever found in Australia, yielded 191 lb. 10 oz. of gold, realizing the sum of £9,534.

The Agricultural and Forestry Museum, housed in the same building is of particular interest to intending settlers, giving plastic illustrations of the resources of the country. Samples of wood and specimens of fruits, cereals, tobacco, silk, etc., are here exhibited, and books on Australian agriculture published by authority of the Government may be purchased from the official in charge.

Admission is free to both institutions between the hours of 11 a. m. and 4 p. m.

The Technological Museum, in connection with the Technical College, Harris Street Ultimo (take Balmain tram, 15 minutes), is invaluable to the student of the resources and industries of the colonies. The exhibits are to a great extent of a technical nature, but include raw and manufactured materials of Australian products.

Disciples of Izaak Walton will find an inspection of the excellent coloured casts of fishes displayed at this institution a great help in their peregrinations with hook and line on the Australian coast and rivers.

Open on weekdays from 8 a. m. until 5 p. m.; Saturdays from 9 a. m. to 1 p. m. Closed on Sundays. Admission free.

The Sydney Free Public Library is contained in a massive building of brown sandstone at the corner of Bent and Macquarie Streets, facing the Domain entrance.

The original library, the nucleus of the present important institution, was established as a private enterprise in the year 1826. The institution now contains about 150,000 volumes, of which 30,000 treat solely on Australian subjects, constituting the most complete collection of Australian literature in the world. The library is for reference only, the lending branch and newspaper room being located in the Queen Victoria Markets, George Street.

Open daily from 10 a. m., and on Sunday afternoons.

The School of Arts, 275 Pitt Street, includes an extensive lending and reference library and a newspaper room in which the world's chief periodicals are kept. Visitors may become members on payment of subscription of £1.0.0. per annum, 5/6 per quarter or 2/6 per month. The institution receives a £ for £ subscription from the Government.

Most of the booksellers carrying on business in Sydney have a circulating library in connection with their establishments, conditions for the membership for which are of a more or less liberal character.

Clubs:— Athenaeum, 19 Castlereagh Street; Australian, corner of Bent and Macquarie Street; New South Wales, Bligh Street; Union, 2 Bligh Street; Warrigal, 145 Macquarie Street; German, 89 Phillip Street; German Club Concordia, 393 Pitt Street, Sydney; Commercial Travellers', 173 Pitt Street; Masonic Club Australian Chambers, 289 Pitt Street; City Tattersalls (sporting), 248 a Pitt Street; Tattersalls, 204 Pitt Street.

Parks. Sydney is, as has been said, exceptionally well supplied with parks, and large areas of ground in different localities within 20 miles of Sydney have been set apart as public reserves. Chief among them are, besides those specially mentioned below: Hyde Park (40 ac.) and Wynyard Park (2 ac.) right in the heart of the city, while a little further out are Belmore (21 ac.); Birchgrove (Balmain) Park (13 ac.); Burwood (15 ac.); Centennial (640 ac.); Moore Park (376 ac.); Randwick Park (25 ac.); Rushcutters Bay Park (27 ac.); St. Leonard's Park (40 ac.); Victoria (University) Park (23 ac.); Wentworth (Glebe) Park (29 ac.) and many others; each of the suburbs have one at least and in some cases two or three. Unfortunately some of the parks are more often than not the resort of undesirable characters whose presence acts as a detriment to their usefulness, and late at night especially, is a menace to the safety of those who venture to cross them. The authorities have made several efforts towards lessening the evil but so far without appreciable results.

The Domain, bounded by Macquarie Street and Sir John Young's Crescent on one side, and by Woolloomooloo Bay and Farm Cove on the other, is the most popular of Sydney parks. In it are contained the Botanical Gardens, Government House, the Art Gallery, and the Geological Museum, comprising a total area of 138 acres. It is traversed by about 4 miles of shady carriage roads and numerous footpaths. At St. Mary's Cathedral and facing the Public Library in Macquarie Street, are the two principal entrances. Near the latter, just inside the Park and facing the main entrance to the Botanical Gardens, stands a bronze statue of Governor Sir Richard Bourke, and two large bronze cannons, mementos of the Crimean War.

Botanical Gardens. Within a few minutes' walk from Circular Quay, partly facing Macquarie Street and girding the Crescent of Farm Cove, are the Botanical Gardens, noted for their beauty and charming position as well as for their wealth of botanical specimens. They are unsurpassed in Australasia, and on account of their situation, perhaps in any part of the world.

Several hothouses contain, besides many other rare plants, some fine specimens of orchids. The Museum and Herbarium, housed in a massive building within the garden enclosure, are open to the public, and the aviary of Australian birds will be found interesting. A recently erected statue of Governor Phillip, the founder of the colony, stands in the upper part of the gardens, facing Macquarie Street.

The Zoological Gardens. The Zoological Gardens, in Moore Park, are subsidized by the Government, and contain a fine collection of Australian fauna, besides a good number of the ubiquitous large animals of foreign countries, among which are some particularly fine specimens of the Royal tiger.

The Gardens are reached by the Randwick, Coogee or Cricket Ground tram in about 15 minutes from the city.

Admission, Adults 6 d., Children 3 d. On Sunday no entrance fee is charged.

TOURIST AND CLIMATIC RESORTS.

The sojourner in Sydney is specially well situated with regard to tourist resorts which he may visit at a very moderate expenditure of time and money, many of the most interesting and attractive localities of the State lying within comparatively easy distance of the metropolis. In addition to this, special facilities are offered to travellers by the Railway autho-

rities (see under "Railways"). First and foremost among these resorts are of course the Blue Mountains, the refuge of the resident tired out with the enervating summer heat of the coastal districts, and a never failing delight to the tourist who views their grandeur for the first time. To the south there is the picturesque Illawarra district, where the mountains approach the coast line and an almost tropical luxuriance of vegetation clothes their slopes. Inland from here are the tablelands round Goulburn and Cooma, while, a little further on, the mountaineer may satisfy his taste for climbing, on the ridges of the Snowy Mountains and the heights of Kosciusko. Nearer still to Sydney than the Blue Mountains is the Hawkesbury River, abounding in beautiful hill and river scenery, while Broken Bay, at its confluence with the sea, rivals in beauty the famous Harbour of Sydney itself. Most of the localities mentioned are, besides for their scenic attractions, noted as climatic resorts, this being particularly the case as regards the Blue Mountains and the southern tablelands round Cooma and Goulburn. The salubrity and purity of the atmosphere is their special recommendation, and as recruiting grounds for failing health or even actual sickness these districts have no rival in New South Wales and probably few in Australia.

For those whose time limits them to shorter tours there is a choice of numerous places, both inland and on the sea coast, where an afternoon or an evening can be most enjoyably spent. It is naturally impossible to enumerate any but a few of the best known pleasure trips that, with Sydney as a starting point, may be taken in New South Wales. Some of the most popular of these tours are given below, but those who wish to wander further afield can obtain full information on the subject from the Government Tourist Department in Sydney and from private traveling agents, as well as from the various guide and timetable books published by the Railway authorities and private firms. Intending tourists will often find it profitable to have their trips arranged through the agency of a tourist office such as Thos. Cook and Son or Cooper.

The Blue Mountains. At a distance of about 40 miles from Sydney, the Blue Mountains, so named for obvious reasons, form part of the great cordillera running north and south along the whole length of the State. The geological construction is ferruginous sandstone, and the precipitous cliffs of this remarkable mountain group rise abruptly from the gloomy gullies, sometimes even overhanging the deep chasms, where foaming mountain torrents, fed by many

KATOOMBA FALLS, BLUE MOUNTAINS
NEW SOUTH WALES

waterfalls, speed over their rocky course. Towards the west their declivity is very abrupt and rugged, and exceeds the eastern slope in altitude, the average height there being about 3,300 feet. Mount Beemerang, probably the highest elevation in the mountains has a height of 4,100 feet. The pure and healthy atmosphere and easy accessibility have made these mountains a favourite summer resort with the Sydney public, and many a little township has sprung up along the railway line. Hotels and boarding houses are numerous, and may be selected from the many advertisements appearing in the Sydney daily papers. Some trout fishing and shooting is obtainable in the valleys, and for sightseers the mountains offer countless attractions, of which some remarkable waterfalls leaping over sheer precipices many hundred feet deep, the Jenolan Caves, beautiful tree-fern gullies, and the celebrated Zig-Zag Railway are among the most unique. Tourists with but a limited time at their command are advised to make their headquarters at Katoomba, it being the most central position for the different points of interest. The limits of this publication precludes a detailed description of the many charming sights, but an exhaustive guide book to the mountains may be had at any booksellers in Sydney.

From Sydney to Katoomba. After crossing the Nepean River near Penrith (34 miles), Emu Plains (36 miles), at the foot of the Blue Mountains, is reached after about an hour's train journey from Sydney. Here the line begins to rise rapidly, and at an elevation of 324 feet, Knapsack Gully (fine panorama of Hawkesbury and Nepean Valley) is crossed by a viaduct of 388 feet in length, then the Lapstone tunnel (1,500 feet) is traversed, and Glenbrook (1,599 feet), the first station on the mountains, comes in to view. A further hour and a quarter of steady ascent brings the train to a standstill at Katoomba (66 miles) at an elevation of 3,336 feet. (First class return fare 24/— . Holiday excursion, from Friday until Monday, 14/9 return.)

The best hotel here, and one of the best on the mountains, is the Carrington, near the railway station. (12/— per day). The neighbourhood of Katoomba affords great scope for pedestrians, and many of the finest views (Katoomba Falls, Nellie's Glen, view of Katoomba and Kanimbla Valleys, etc.) are within 20 or 30 minutes walk from the township. Being situated on a plateau, the roads and tracks are fairly level until they suddenly terminate at the edge of some dangerous cliff with a sudden drop of a thousand or more feet.

Katoomba Falls. Among the most beautiful and unique sights on the mountains, and the least known, are the Katoomba Falls in midwinter, when the thermometer registers a few degrees below freezing point, and the ground is covered with snow. The spray, showered by the wind over a considerable area around the falls, consolidates on the objects on which it descends, coating the evergreen leaves and stems of trees with a transparent layer of ice, while huge icicles hang everywhere from the rocks and trees surrounding the falls. At night, in the light of the full moon, the spectacle of this iridescent forest of glass, hovered over by a lunar rainbow, is one of wondrous beauty, transporting the onlooker into fairyland.*)

The Jenolan Caves. Among the number of wonderful limestone caves occurring in New South Wales, the Jenolan or Fish River Caves, lying in a deep valley on the eastern side of the Blue Mountains at an altitude of 2,400 feet, are the best known and the most easily accessible; they are of great beauty, the fantastic and varied forms of the stalactites and stalagmites in the different chambers and grottoes lending an indescribable charm to this subterranean wonderland, which a pen is powerless to portray. The origin of these and similar caverns is best described by the following interesting extract from C. S. Wilkinson's Geological observations on the Jenolan Caves. "It is not uninteresting to reflect that this limestone, now a compact grey marble, was once a mass of living corals, 'stone lilies', and molluscs, revealing the former existence, in the Siluro-Devonian epoch, of condition of marine life somewhat resembling those which support the beautiful living forms which build up the reefs in the coral seas of the present day: and it is significant of the vast changes that this part of the surface of the earth has undergone, when we see fresh water streams at an elevation of several thousand feet above the sea, now flowing through rocks that were originally formed beneath the waves of the ocean, at a very remote period of the earth's history. First, the decaying vegetation of some ancient forest is invisibly distilling the gas known as carbonic acid: then a storm of rain falls, clearing the air of the noxious gas, and distributing a thousand streamlets of acid

*) In the beginning of July 1901 present writer visited the falls under the circumstances described, and on returning the same night to view the scene by moonlight, he found that his were the only footmarks in the snow leading to and from the falls. No one else had been there during the whole day. This will serve to illustrate how little the mountains are frequented during the winter months, which is really, provided the weather is clear, the best season in the year for a visit to that picturesque and justly renowned tableland.

water over the surrounding country, which as it drains off, not only wears the rocks it passes over but dissolves them in minute quantities, especially such as contain much lime; and then, laden with its various compounds, flows off to the distant sea, where reef corals, lying in fringing banks round the coast are slowly absorbing the lime from the water around them and building the fragile coatings that protect them during life. Slowly as the land sinks the coral bank increases in height, for reef corals can only live near the surface of the water, and soon a considerable thickness has been obtained; while below the upper zone of live corals lies a vast charnel house of dead coral coverings. Then comes a change; suitable temperatures or some other essential condition fails, killing out all the corals, and through long ages other deposits accumulate over them gradually crushing and consolidating the coral bank into a firm rock. At last a convulsion of the earth's crust brings it up from the buried depth in which it lies, leaving it tilted on its edge, but still, perhaps, below the surface of the ground. Rain, frost and snow slowly remove what covers it, until it lies exposed again to the sunlight, but so changed that only for the silent and irresistible testimony of the fossil forms of which it is composed, it were hard to believe that this narrow band of hard grey rock was once the huge but fragile coral bank glistening in the bright waters with a thousand hues. And now the process is repeated. The decaying vegetation of the surrounding forest produces the carbonic acid, the rains spread it over the ground, which is now the most favourable for being dissolved, and the consequence is that the acid water saturates itself with the limestone rock, and, whenever the least evaporation takes place, has to deposit some of its dissolved carbonate of lime in one of the many stalactitic forms before it can flow off to the sea and distribute its remaining contents to fresh coral banks. Thus the old coral reef melts far inland, and the lime that formed the coatings of its corals is again utilised for the same purpose. What a simple succession of causes and effects! And yet, before the circle is completed, long ages of time have come and gone. And what a fine example of the balance between the waste and reproduction that takes place in Nature!"

The caves may be reached by coach from either Katoomba (26 miles, 42/— return fare, special coach), Tarana (28 miles, 24/— return, daily coach), or Mount Victoria (36 miles, 20/— return, daily coach), the latter being the favourite route on account of its better roads and more varied scenery. The greater part of the Victoria road to

the caves winds along the summits of high tablelands, over 4,000 feet above sea level being reached at Bendo Pinch, and many fine glimpses of wild and picturesque scenery are gained en route. At the caves a comfortable accommodation house has been erected by the Government. The keeper and his assistants, without whom no visitor is allowed to enter the caves, are prohibited from receiving any fee or gratuity for their services, but the cost of the magnesium wire (about 3/— per day) is divided among the party of visitors in charge of a guide. It occupies several days to visit the whole explored portion of the caves.

The Wombeyan Caves, of similar formation, have some additional points of interest, and are situated 30 miles to the north east of Goulburn (rail 134 m., R. fare 40/—), and 13 miles from Taralga, where hotel accommodation is procurable. A coach leaves Goulburn daily for Taralga (return fare 15/—).

The Yarrangobilly Caves, on a creek of the same name, 12 miles north of Kiandra, are said to rival if not surpass the other caves in magnificences. They may be reached via Cooma (rail 265 m. R. fare 77/9) thence by coach (special arrangement). A coach leaves for Kiandra Tuesdays and Saturdays, fare 40/—.

Belubulah Caves. Some new caves on the Belubulah River, between Lyndhurst and Canowindra, on a branch of the Western line, have recently been discovered, and offer a fresh field for exploration to the tourist.

From Eden to Bombala. The Southern Tableland, where the Yarrangobilly Caves are, should certainly not be omitted from the itinerary of the visitor who wishes to gain a comprehensive idea of the State, as well as by those in search of either field sport, scenic attractions, or health. The most usual and quickest way of reaching the district is to go by rail to Cooma (vide Yarrangobilly Caves), and from there arrange excursions. Another, and most interesting route, if the slight discomforts of the little coastal steamers are not objected to, is that by way of Eden, and the overland trip from there to Bombala, which will serve as a suitable base for tourist enterprise, will be found to be most picturesque.

The neighbourhood of Bombala, a small town on the Monaro Tableland, has been much spoken of as a possible, even probable site for the Federal Capital, and its beautiful climate and scenery, inexhaustible water supply and proximity to a fine port — Twofold Bay — put the district high up in the list of claimants.

The Union Co's. boats make Eden, on Twofold Bay, a port of call. It is now an unimportant spot, a mere township; but still bears traces of the days when it was a flourishing place, the headquarters of the whaling industry. Whales are still caught at Eden, and the waters of Twofold Bay teem with fish. On the opposite side of the Bay from Eden is Boyd Town — a collection of picturesque ruins — built by the old South Sea hero, Ben Boyd; and deserted by him just when it appeared likely to become what he intended, a great Southern city.

The road from Eden to Bombala is picturesque in the extreme, and the change from the semi-tropical vegetation of the coast to the rolling downs of the Monaro Plateau, startling in its suddenness. Twelve miles from Eden is Pambula, an alluvial gold mining centre, and thence, twenty miles to the foot of the Tautawanglo Mountain, the road runs through hilly, picturesque country, where tree ferns, palms, grapes and peaches grow in profusion. Up the mountain one may ascend by either of two roads — the Big Jack, very steep and running in a zig-zag, but not possessing any features of special interest, or the Tautawanglo, longer than the Big Jack by some miles, but less steep and of wonderful beauty. About half way up is a level spot, called "The Look Out". There, surrounded by giant gums, veiled with starry white clematis, with wild crimson fuschias and heavy scented tree musk rioting in profusion into the very roadway, with great fern-clad gullies, whose depths have never been even guessed at, at one's feet, one can look far away for thirty miles to a gap in the trees where on a clear day, is visible a glimpse of the Pacific Ocean. The top of the mountain reached, the scene and the climate alter abruptly. Cathcart, a little township not far from the top, is situated in the midst of fertile but uninteresting blacksoil plains. Nearer Bombala, however are tree covered hills, the town itself lying in a hollow, with a small but inexhaustible river running through the middle of it. The country about here is largely volcanic. Some picturesque lakes, covered generally with black swans and wild ducks, occupy the craters of extinct volcanoes, and a half buried pine forest has been discovered forty feet beneath the present surface, covered by still soft volcanic deposits.

Gold and silver has been found about Bombala but not, so far, in payable quantities, though the much boomed Bonang mines, on the Victorian border, are only about twenty miles distant. Splendid shooting may be had in the district; Kangaroos and other marsupials are still fairly plentiful, while duck, quail and plover abound in the in-

numerable water holes. The climate is bracing — cold, with occasional heavy snowstorms in winter, while the summers are temperate. The icy blasts and hot winds, generally so trying on exposed tablelands, are not felt at Bombala, owing to the high hills which surround the town, and from the top of which, on clear summer days, may be seen the cloud-like masses of snow on Kosciusko.

Other Tours. Lovers of wild and rugged scenery should not omit to visit some of the many estuaries of Port Hacking and Broken Bay, both of which, with their many beautiful inlets and tidal rivers penetrating far inland, offer numerous ideal places for a holiday, National Park, the Hawkesbury River, Cowan Creek, and Pittwater being noted for their fine scenery.

National Park. One of the most beautiful spots in the neighbourhood of Sydney is undoubtedly National Park, a public reserve of virgin bush and forest land, some sixteen miles by train from the city. The Park is managed by a very efficient Board of Trustees who are assisted by an annual Government grant ranging from £ 2,000 to £ 4,000. The reserve has an area of nearly 36,500 acres, with a sea frontage of about eight miles, and is indented by several little coves and arms of the sea. Port Hacking lies on its northern boundaries, and the Port Hacking River, as well as several picturesque creeks, take their course through its wild domain.

The native flora and fauna is strictly protected within the limits of the park by the board of trustees, who have also instituted a sea-fish hatchery in a tidal creek, and the tourist who does not wish to go further inland, will here have ample opportunities not only to get a good idea of Australian costal scenery, but also to observe the indigenous animal life. The lyre bird, that beautiful Australian pheasant which is becoming more rare every day, is frequently met with, and the rock wallaby, a pretty little animal of the kangaroo variety, shows little fear at the approach of human beings and at dusk may often be seen in numbers near the Audley Accomodation House. Red and fallow deer have been introduced at different times and are thriving well; the latter are kept within a large fenced-in area and can often be seen on the river bank, but the red deer keep to the wildest recesses of the forest and are therefore more rarely met with.

Close to the house and overhanging Kangaroo Creek, there is a cavern of ethnological interest, heaps of kitchen middens and a number of more or less crude charcoal and

NATIONAL PARK

red ochre drawings of human hands and fishes giving evidence of its former occupation by aborigines.

The Accomodation House at Audley, which is the most central starting place for excursions in the park, as well as "Warumbul", another similar resthouse some miles further down stream, is also under the supervision of the trustees, and good board and accomodation can be had at either place at the rate of about 8/— per day or 2 guineas per week. Rowing boats may be hired at Audley.

There is an illustrated official guidebook to the Park which can be recommended.

For Audley take train to National Park or Loftus. Return fare on week days 2/6 first and 1/6 second class; on Saturdays, Sundays, and holidays, 1/6 and 1/— first and second class respectively. From Loftus and National Park station the distance to Audley is about two and one miles respectively (coach 6 d.).

Port Hacking, lying a little to the southward of Botany Bay, is a large inlet with many estuaries, and much beloved by amateur fishermen. Its scenic attractions are also numerous and varied and an ideal holiday can be spent in its quiet retreats. There are several hotels and boarding houses, the most pleasantly situated being the Port Hacking Hotel. Intending visitors should notify the management of their arrival, in order that a steam launch may be sent to meet them. Means of access: Train to Sutherland, thence per coach to launch jetty.

Cowan Creek. The tourist could not do better than commence with a trip to Cowan Creek, a tidal estuary of Broken Bay, whose branches creep far in among the wooded hills of Kuring-gai Chase, a vast tract of wild and rocky mountain country recently set apart as a national reserve, where the primeval state of the forest has remained untouched by the hand of man.

Means of access: Take train to Berowra (altitude 679 feet) leaving Redfern station at 9.5 a. m., arriving at Berowra at 10.3. a. m. (Return fare 5/—, holiday excursion 2/4). Then cross railway line and follow path through the bush down the hill side (30 minutes) to Windybank, on Waratah Bay, where boats may be hired at 5/— per day, and light refreshments are obtainable. Tourists however will find it advisable to supply themselves with all their requirements in Sydney. A steam launch capable of carrying a large number of passengers can be hired at 50/— per day, and house-boats, much in favour with fishing parties, may be hired from 35/— to 60/— per week.

A similar tour can be made to Cowan (altitude 627 feet) the next stopping place of the train, situated at an equal distance from the water (Jerusalem Bay). Cowan Creek can also be reached by a good road ($1\frac{1}{2}$ hours drive) from Pymble (altitude 449 feet, R. fare $1/4$) or Wahroonga (623 feet, R. fare $1/10$) where vehicles can be hired (special arrangement). Trains leave Milsons Point Station hourly. Time of journey 40 min. This tour is also practicable for cyclists.

Hawkesbury River (9 feet above sea level), a distance of 36 miles from Sydney, is the next station after Cowan. The railway bridge across the river, measuring 2,900 feet, is the longest in Australia, and is supported by six piers each resting on a caisson filled with concrete, the foundations of which vary from a depth of 101 to 162 feet in the bed of the river. The scenery is splendid, and the Hawkesbury has been compared to the Rhine, to which famous stream, although its banks lack the restfulness of cultivated hills covered with grape vine and the romantic charm of the many ruined castles, it may be said to bear some resemblance. (Good fishing and boating). Refreshments are obtainable at a hotel near the station. During the holiday season the visitor may avail himself of combined rail and steamer's ticket issued by the railway authorities at the remarkably low rate of $5/6$ first class (watch advertisements in daily papers), which affords a good opportunity of seeing the sights of the river in a day's outing. (Restaurant on board steamer, meals $2/6$). For parties numbering four or more the expenses for the following one day trips will amount to about 20/— each.

Round trip: Hawkesbury-Manly. Leave Sydney by the 9.5 a. m. train for Hawkesbury station or Berowra, take steamer to Newport, lunch at Newport Hotel or Bay View House, coach at 3.30 to Manly, thence steamer to Circular Quay, arriving in Sydney about 6 p. m.

The Kurrajongs. Leave Sydney by morning train for Richmond, coach to Kurrajong Heights lunch and return to Sydney, arriving at 6.5 p. m.

Bulli Pass. Leave Sydney by 8.30 a. m. train for Bulli, coach to Bulli Pass, Webber's lookout and the Laddin falls, lunch at falls, and return to Sydney, arriving at 6.5 p. m.

Newport. A drive from Manly to Newport (13 miles), a charming spot on Pittwater, the southern main arm of Broken Bay, affords many and various charming views, and can be recommended to the tourist who wishes to spend a pleasant day amidst coastal scenery. Comfortable carriages can be hired at Manly at a moment's notice ($30/$ — to $40/$ — per day), and a coach leaves Manly daily at 9.45 a. m. returning from

Newport at 3.30. Return fare 4/—. The road is good and suitable for cyclists. Refreshments are obtainable at the Newport Hotel. (8/— per day, 42/— per week). Boats may also be hired here. A walk to the sea beach (picturesque scenery) should be taken, distance 12 minutes from hotel.

Barranjoey lighthouse is reached by a very rough but exceedingly picturesque road, distance 7 miles.

Manly (Clarendon Hotel), a most popular seaside resort and suburb, is situated on the narrow isthmus connecting North Head with the mainland, at a distance of about 7 miles from Sydney. A shaded promenade runs along the whole length of the sea beach and some pretty drives may be taken in the neighbourhood. (See Narrabeen, Newport, etc.) Ocean fishing is usually obtainable just outside Shelly Beach, and arrangements for fishing excursions may be made with local fishermen. Boats are for hire near ferry wharf at 1/— per hour, 3/— per half day, and 5/— per day. Fast ferry steamers leave Circular Quay for Manly about every half hour (return fare 8d.), time occupied for return journey about 1½ hours. It is not advisable to take this trip on a Sunday as the steamers are usually uncomfortably overcrowded on that day.

Watsons Bay, a little cove formed by South Head at the entrance of the harbour, is situated about 6 miles from Circular Quay. Paths have been made on the edge of the cliffs abutting the sea, from which an extensive panorama over the ocean and harbour is obtained. The Gap, where the wreck of the Dunbar occurred, and the Lighthouse, are other attractions. Ferry boats ply about hourly between Circular Quay and Watsons. Return fare 6d. Time about 1¼ hours return.

A good road forming a pleasant short drive connects South Head with the city. The extension of the electric tram line to Watsons Bay has recently been completed and the Bay can now be reached by a direct line from King Street.

Pedestrians may walk to Bondi Beach along the cliffs (about 3 miles). After passing lighthouse take road branching to the left. From Bondi there is frequent tram communication with the city.

Coogee Beach, between rock headlands, good swimming baths, distance from city 6 miles, reached by tram in 45 minutes, fare 3d.

Botany Bay, into which flows the Georges River, offers no great scenic attractions but is interesting because of its historical associations. It was here where Captain Cook first landed and hoisted the British flag in 1770. Here

also are the resting places of the first two Europeans buried on Australian soil, Forbes Sutherland, one of Captain Cook's sailors, and later in 1788 Pere le Recieveur, naturalist of the *Astrolabe*, who died here from the effects of wounds received at an encounter with the natives of Tutuila (Samoa).

La Perouse, the northern headland of Botany Bay, was so named after the unfortunate French Navigator who called here a few days after the arrival of Captain Phillip in 1788 to refit his vessels for further explorations of the unknown islands of the South Seas, from which cruise he was destined never to return. A monument has here been erected by the French people of Sydney to commemorate the visit of that intrepid voyager. A native reserve and camp of the remaining aborigines is also here.

Botany is reached by tram (fare 4d.) in about 1 hour from Elizabeth Street.

Lady Robinson's Beach, on the Western shore of Botany Bay (Hotel and good swimming baths), is 25 minutes by rail from Redfern station. Return fare 1/3 and 1/—.

NEWCASTLE.

Newcastle, the second city of New South Wales, is situated at the mouth of the Hunter River at its confluence into Port Hunter, and is distant from Sydney 62 miles by water and 101 by land. It is in railway connection with the metropolis and the rest of the State, while the northern trunk line to the Queensland border, runs through it. Return fares from Sydney, first class 20/—, second 12/6 (holiday excursion).

The town owes its importance to the very extensive coal beds in the vicinity, the carboniferous area being sufficiently large to maintain the output at the present rate for 500 years. There are some 60 or more collieries in operation in the district, the principal mines being: Wallsend, Lambton, Duckenfield, Gréta, Waratah, Stockton, Seaham, but there are many others of almost, if not quite, equal importance. A very extended export trade in coal has been established, and the splendid shipping facilities, due both to Government and private enterprise, attract vessels to load there for all parts of the world. During 1902 a total of 1,508 vessels with an aggregate tonnage of 2,137,087 arrived in the port, and it can well be imagined that during the busy season the harbour of Newcastle presents a very animated scene, to which the fact that a large proportion of the vessels are sailing ships loading coal,

lends an added picturesqueness. During the year in question 2,966,764 tons of coal, valued at £ 1,484,594 were shipped for export, a large amount of it going to America (North and South), the Pacific Islands, the Malay Archipelago and the East generally. Besides coal, Newcastle has another profitable branch of export trade in the shipment of wool direct, and also in the handling of most of the produce of the Hunter River district.

Newcastle at the 1903 census had a population of 58,620, being the fifth largest city in the Australian Commonwealth. It was erected into a Municipality in 1859, and has now between 25 and 30 miles of streets, while its public buildings are above the average of the usual provincial town. The character of its principal industry prevents it being as cleanly as might be wished, but the municipal authorities are doing their best to minimise the effects of the coal dust which to the visitor seems to be thickly everywhere. The city is well laid out, with good paved streets electrically lighted, and a tramway system has been in operation for a number of years. The usual public offices and private business establishments are substantially built, and in some cases may lay claim to some architectural importance. It is a cathedral city, and possesses several large churches of the different denominations. Fortifications have been erected to protect the town from attack by sea and the various defences are equipped and manned on up-to-date methods. Various industrial establishments have been founded at Newcastle, chief among them being:— boot factories, breweries, shipbuilding yards, engineering works, a biscuit factory and meat works. The city is well supplied with water, and owing to its topography (the land rising steeply from the sea) is considered healthy. Four trains run daily (except Saturdays and Sundays on which three trains run), and there is in addition a frequent service of coastal craft carrying both passengers and cargo.

BROKEN HILL.

Broken Hill, the "Silver City", is situated on the extreme western border of the State, about 925 miles from the metropolis. It owes its existence purely to the discovery of the silver-lead deposits (probably the richest in the world) in the Barrier Ranges. The field, which was discovered in 1883, is known to extend over 2,500 square miles of country, and the Broken Hill lode is the largest as yet discovered, varying in width from 10 to 200 feet and may be traced for several miles, the country being taken up by several mining companies. The successful reduction of the sulphide ores

and the more recent efficiency of the magnetic separation in the treatment of the low grade zinc lead sulphides has added materially to the value of the mines. The principal company operating on the field is the Broken Hill Proprietary, which from 1885 to May 1902, produced 114,346,940 oz. of silver and 533,284 tons of lead, paying dividends and bonuses in that period to the amount of £ 7,496,000. The ramifications of the Company extend to the coast of New South Wales and South Australia, elaborate smelting and refining works being in working order at Port Pirie, while coal is drawn from the coastal districts of the Eastern State. The quantity and value of metals and minerals produced on the field during 1902 may be summarised as follows:— Silver lead ores, Crudes, 1,723,780 cwt., £ 112,847; Concentrates, 4,631,180 cwt., £ 912,495; Slimes, 979,080 cwt., £ 30,121; Zincs, 5,562 cwt., £ 239; Copper 3,270 cwt.; Tin, 425 cwt., £ 922; Gold, 3,622½ oz., £ 14,490, or a total value of £ 1,072,187. Broken Hill is reached most readily via Melbourne and Adelaide, the fares being: £ 8.14.9 1st class, and £ 5.15.6 2nd class single, and £ 13.2.0 1st and £ 8.13.6 2nd class return. Another way is by rail to Cobar and thence by coach.

The population of Broken Hill at the last census (1903) was 27,160, and the town possesses all the attributes of the usual mining centre. The business portion of the town is well built, there are several good hotels and the streets are lit both by gas and electricity. The district is incorporated with some 130 miles of roadway and a rateable value of £ 562,290. Among the most conspicuous buildings are the hospital, court-house, town hall, post office, several churches and schools and five banks. There are three racing clubs, a public recreation ground, and a daily paper.

GOULBURN.

Goulburn is the principal depot of the inland trade of the Southern districts and is situated 134 miles from Sydney in a southwesterly direction. It lies 2,071 feet above sea level and is regarded very favourably as a health resort. Connection by rail from Sydney (fares, 1st return 40/—, 2nd 26/6) renders it easily accessible, and a considerable amount of agricultural and dairying produce, including wheat and other cereals, potatoes, milk, butter and bacon passes through the railway goods shed every year. It is a distributing centre for a large farming and pastoral community, and a cathedral city (Anglican and Roman Catholic), and besides its various churches can boast of some solid

buildings in Post Office, Gaol, Court House, and Town Hall. Its population is 10,560 (census 1903), and the annual value of its rateable property £ 61,510.

MAITLAND.

Lying 120 miles north of Sydney and 20 miles from Newcastle on the northern railway, the town consists of the two municipalities, East and West Maitland, of which the latter is much the larger. The Hunter River flows through the town, which, as it is built on low lying ground, is much subject to floods. It is the centre of a large agricultural and dairying district, the principal crops being wheat, lucerne, maize, potatoes, and other vegetables. The coal measures in the vicinity are of great extent and excellent quality and are being worked by several collieries. A large volume of the inland trade of the north of New South Wales is transacted at Maitland, and the business premises of private firms are large and commodious. The public buildings include, Court House, Town Hall, Commercial Bank of Sydney, Hospital, and sundry churches. The town is lighted by gas, has in all about 65 miles of street, a telephone installation, and a water supply. Its population at the last census was 10,340 and it is rapidly growing in numbers.

BATHURST.

Founded by Governor Macquarie in 1815, Bathurst is one of the oldest towns in New South Wales and possesses more historic interest than the generality of provincial settlements. It is the entrepot of trade with the west, being an important station on the great trunk line distant 145 miles from Sydney. It is situated on the eastern edge of the great central plateau of Australia at a height of 2,153 feet above sea level. The streets of the town are wide and planted with trees, the centre being reserved for a park. There is a gas and water supply, a telephone service, and indeed all the attributes of a modern city. It is a cathedral town, there being both Anglican and Roman Catholic bishops there. Around Bathurst the district is both agricultural and pastoral, while gold and other mining is extensively followed, though the town has lost much of its old time glory in this respect. The principal products are wheat and other cereals, potatoes, and grapes. At the last census the population was 9,380. Two passenger trains and several goods trains run daily from Sydney, the return fares being first class, 43/—, second class, 28/9, with a weekly excursion at reduced prices.

BOURKE.

Bourke, on the Darling River, 503 miles north-west from Sydney, is the centre of pastoral country which in normal seasons carries enormous flocks of sheep. The town is commercially connected with a very large area, reaching northward over the Queensland border and westward to the South Australian boundary. Artesian water exists in the district and several large bores have been put down in the vicinity of the town. Besides the railway to Sydney (fares 125/3, first and 84/6 second class return) considerable steamer traffic passes through the town when the Darling is navigable. Of late years Bourke has suffered very severely through the unparalleled drought conditions and the prosperity of the town is not what it used to be. Its population now is about 3,500.

ORANGE.

Orange lies about 50 miles west of Bathurst and 192 miles from Sydney on the Great Western Railway, and has the same interests and the same characteristics as the former town. It is noted for the salubrity of its climate and is rapidly finding favour as a health resort. A very large area of land in the surrounding district is under cultivation, and the orchards around the town supply a fair proportion of fruit to the metropolitan markets. Some rich gold fields are in operation near the town including the famous Ophir Field where gold was first worked in New South Wales in 1851. The town has gas and water supply, about 15 miles of roads and a population of 6,650. The fares from Sydney return, are 57/— and 38/— first and second class respectively, and holiday excursion rates are 50/6 and 33/9. Various factories have been established in the town.

GRAFTON.

Grafton is the principal town in the rich North Coast district of New South Wales, situated on the Clarence River, about 528 miles by land and 362 miles by sea north of Sydney. The town is about 45 miles from the mouth of the river which is navigable the whole way up. It is surrounded by a very prolific agricultural district, maize, sugar cane, and potatoes supplying the principal crops, while dairying and pig raising have of recent years been receiving increased attention. Several steamers ply to and from Sydney every week, and a large trade is done in produce. The population in 1903 was 5,700.

QUEENSLAND.

In some respects the State of Queensland is the most interesting province of the Australian group for the visitor in search of either information or enjoyment. It is one of the youngest, indeed it may be considered the youngest of the States, for development only dates back to the year 1840, and in consequence it affords ample opportunity to the observer to judge of the methods of settlement, the trials of pioneer, and the first steps towards future greatness exhibited by all the Anglo-Saxon colonies in turn. The history of the State can be told in a few words. Up to the year 1840 the Moreton Bay settlement was almost entirely a penal establishment, where the more refractory, "double dyed and thrice convicted" convicts were sent from Sydney. With such a population to handle it is no wonder that the authorities set their face against free immigrants and gave them little or no help. But in 1838 the order went forth that the convicts were to be withdrawn, and a band of pioneer squatters, taking advantage of the removal of the prohibition against approaching without permission within 100 miles of Brisbane, took up the Darling Downs, that wonderfully fertile tract of country across the dividing range. Brisbane itself and the adjacent lands were thrown open to free settlement, and the little place on the banks of the Brisbane River began to grow. With the freedom came a desire for self government, and after a long struggle, protracted through the opposition of certain sections, Queensland was erected into a separate colony in 1859. The succeeding decade was a most eventful one. In the early sixties, the expansion was steady, the pastoralists pushing out into the interior with their flocks and herds in all directions, opening up new country for their stock, and new ports for their produce. Then came, in 1865—66, a financial crisis when the newly born colony was shaken to its foundations, and the early promises of prosperity seemed destined never to be fulfilled. But the timely discovery of the Gympie goldfield in 1867 changed the current of disaster, and with the permanency of that field fortune again smiled. Then followed the settlement of the more northern towns, the discovery of fresh mineral wealth at Charters Towers in 1872, the Palmer in 1873, the Hodgkinson — to name only a few of the finds unearthed — and finally of Mount Morgan in 1882. Pastoral occupation had, all this

time gone steadily forward, and by the seventies practically the whole State had been parcelled out into holdings large and small. Railways, to connect the interior towns with the coast and enable the "inside men" to get their supplies more expeditiously and to dispose of their wool etc. to greater advantage, were pushed forward, and closer settlement with the accompanying expansion of agriculture soon made itself felt. Along the coastal belt in the north the richness of the land was proved in all directions, and sugar growing became a very important factor in the wealth production of the community. Politically, affairs evolved along the usual lines with the usual changes and coalitions, and by well devised domestic legislation regulating the different industries, the onward progress of the community was set well on its way. That progress has continued down to the present day, and though things are now more quietly conducted and there is less of rapid fortune making, Queensland still continues to forge ahead, and exhibit every sign that within her own boundaries she has all the elements which go to the making of a great country.

It will thus be seen that there is much to study, for the traveller. In Brisbane he may glean knowledge of how rapidly an unconsidered village may spread to the dimensions of a city and accumulate wealth and population in a short space of time, while not so very far distant from the metropolis he may come upon such as are yet engaged in a struggle with nature. A three days' trip will show him in the Darling Downs one of the most fertile tracts of country, not only in Australia but in the world, a hundred miles journey to Gympie, and a day or two spent there will put him au fait with all the intricate methods of gold extraction from deep level ores, and a much shorter excursion will show him many a pastoral property whose owner is still laying the foundation of his future competency. But to those who have a sufficiency of time on their hands a coastal trip of a much longer duration offers manifold attractions. The journey by comfortable steamer, from Brisbane as far north as Cairns is one of the most instructive, and if undertaken in the winter season one of the most enjoyable that could be devised. Smooth water prevails nearly all the way within the protection of the Great Barrier reef and the tourist passes in succession Rockhampton, the unofficial capital of Central Queensland, having at its back a vast tract of pastoral country, besides Mount Morgan, itself well worth the short train journey, Mackay, the centre of a great sugar growing area, where on the plantations may be seen in various stages of the work of cane production,

ISLANDS AT HINCHINBROOK PASSAGE, NORTH QUEENSLAND.

Townsville, where in an artificial harbour the ships load the produce of the back country or discharge the supplies for the stations round Winton and Hughenden, and the mines of Charters Towers, again easily accessible and worth a visit as the richest goldfield in the State. At Cairns there are more sugar plantations and other evidences of tropical agriculture, while a railway trip of a few hours takes the passenger to the top of the Dividing Range and to the famous Barron Falls, where the river drops 830 feet in 50 chains. But of scenery there is abundance. Practically all the way up the coast from Keppel Bay (Rockhampton) northwards, where the range approaches the shore lines the panorama of rugged mountains and wooded islands is an ever changing one. Between Mackay and Bowen the steamer passes through Whitsunday Passage amid a group of wooded islands rising precipitously from the sea. The "show scene" of the northern trip is Hinchinbrook, which for wild and natural beauty can scarcely be surpassed, the rugged mountain slopes on each side of the channel being clothed in tropical verdure, laced with the thin silver of waterfalls. Thence onwards to Cairns the scenery remains of the same picturesque character, and the trip is yearly attracting more notice. There and back on the steamer takes about three weeks, without allowing time for the excursions inland to Mount Morgan and Charters Towers, but even with one or both of these a month would be all that is necessary to spend, and anyone who devoted that space of time to it may rest assured that he will be well satisfied with the result.

AREA AND BOUNDARIES.

Queensland is the third largest of the Australian States with an area of 668,497 sq. miles or 427,838,080 acres. More than half of its territory is within the tropical belt, and it extends from latitude $10^{\circ} 41'$ to the 129^{th} parallel, the tropic of Capricorn bisecting it. The greatest length from north to south is about 1,200 miles and the greatest breadth from east to west 800 miles. Queensland is bounded on the east and north by the Pacific Ocean and the Gulf of Carpentaria, on the west by the 138^{th} meridian of east longitude from a point on the Gulf of Carpentaria to 26° S., thence by that parallel to the 141^{st} meridian, and from this intersection to 29° south. The Southern boundary consists of this parallel running from the 141^{st} meridian to the Macintyre River, by that river to its junction with the Dumaresq, thence along the ridge of the Dividing and Macpherson Ranges to Point

Danger in latitude $28^{\circ} 9'$ south, longitude $153^{\circ} 33'$ east. The maritime boundary of the State is somewhat more extensive and comprises all islands included within a line drawn from Sandy Cape northward to the south eastern limit of the Great Barrier Reef, thence following the line of the Great Barrier Reefs to their north eastern extremity near $9\frac{1}{2}^{\circ}$ S. latitude, thence in a north westerly direction embracing East, Anchor and Bramble Bays, thence from Bramble Bay in a line W. by S. embracing Warrior Reef, Saibai and Tuan islands, thence diverging in a north westerly direction so as to embrace the group known as Talbot Islands, thence to and embracing the Deliverance Islands and onwards in a W. by S. direction to 38° E. long.

PHYSICAL FEATURES.

The physical disposition of Queensland is closely analagous to that of New South Wales. There is first of all a coastal belt varying from eighty to a few miles in breadth, which is either undulating or flat in contour and supplies, especially in the north, the richest agricultural land in the State. Then there is the main or Dividing Range running through the whole length of the State from north to south, and broken in places into two or more parallel chains. On the western side of this cordillera the land trends gradually away to the great interior plains with belts of poor country dividing large stretches of open plains or lightly timbered country of excellent pastoral properties. The main range has several subsidiary names, in different parts, such as the Bunya Mountains near Dalby, Connors Range and the Boomer Mountains in the Central District. There are some low detached ranges west of the main range, but none of any importance. The highest peaks in the Dividing Range are Mount Bartle Frere (5,438 feet) near Cooktown, Mount Roberts (4,350 feet) in the Central District and Mount Barney (4,300 feet) in the Macpherson Range, while in the Bunya Mountains are Mount Mowbillah (3,605 feet) and Mount Haly (3,130 feet). Some miles north of Brisbane is a curious detached group of mountains easily discernible from Moreton Bay, to which the name of the Glasshouse Mountains was given by Captain Cook. They are fantastically shaped, but are of no great altitude.

The rivers of Queensland may be divided, roughly into three systems — the Coastal, the Western and the Gulf. The rivers of the first named all lie between the dividing range and the eastern seaboard, and among

them are many fine streams, some of which are navigable for a considerable distance from their mouth. Chief among them are (from south to north), the Brisbane, the Burnett, the Fitzroy (receiving the Dawson, Mackenzie, Isaacs and others, and draining 55,603 sq. miles), the Burdekin (the finest stream of the system, draining with its tributaries 53,529 sq. miles), the Ross, the Johnstone, the Mulgrave, the Barron (in which occur the famous falls), the Bloomfield, Kennedy and many others in the Cape Yorke Peninsula. The Western system is in connection with the great Darling River system of New South Wales, and its rivers include the Macintyre or Barwon, the Condamine, Warrego, Nive, Laiylo, Paroo, Bulloo, Barcoo and Coopers Creek. These rivers are subject to heavy floods, but in the dry season they degenerate into chains of waterholes or even evaporate altogether, while many of the smaller streams lose themselves in the great plains or central desert. The Gulf system has some fine rivers, extending in a few cases hundreds of miles in the interior and watering a large tract of valuable country. The chief streams are, the Mitchell, the Gilbert, the Norman, Flinders, Leichhardt and Albert, all of which receive many tributaries in the upper part of their course.

The coast line of Queensland measures about 3,000 miles and is considerably indented, with several good harbours and roadsteads occurring throughout its entire length. The chief indentations are Moreton Bay, Wide Bay, Hervey Bay, Port Curtis, Keppel Bay, Broad Sound, Repulse Bay, Port Denison, Cleveland Bay, Rockingham Bay, Mownbyan Harbour, Trinity Bay, Princess Charlotte Bay, Temple Bay and Albatross Bay, the last named being in the Gulf of Carpentaria.

There are numerous islands off the coast, among which may be mentioned, Moreton and Stradbroke Islands, forming Moreton Bay, Great Sandy Island, Lady Elliot Island, Curtis Island, Percy Islands, Cumberland Islands, Whitsunday Island, Magnetic Island (protecting the harbour of Townsville), Hinchinbrook Island, Low Island, Thursday Island, Friday Island, Prince of Wales Island and others of a group north of Cape York Peninsula, and the Wellesley group in the Gulf of Carpentaria consisting of Berthwick, Mornington and Sweers Islands. From Great Sandy Island, the Barrier Reef with its innumerable shoals, bays and small islands, extends to the northernmost extremity of the State, and within its protection smooth waters are experienced generally all the way up the coast. There are no lakes of any magnitude in Queensland.

CLIMATE AND RAINFALL.

It would be difficult to describe the climate of Queensland comprehensively in a short paragraph. Its extent does not run so far south as the other Australian States, so that, speaking generally, it can be said that it is decidedly warmer. Indeed, from the southern boundary northward, the temperatures rise high during the summer months and, after the latitude of Rockhampton is passed, true tropical conditions obtain. But along the coast at any rate a sea breeze, which almost invariably sets in during the morning and extends some distance inland, tempers the heat, and there is an absence of the disconcerting alleviations of heat and cold which are occasionally met with in New South Wales and Victoria, as well as a marked absence of the "hot winds" of Melbourne and Adelaide. In other words the climate is more constant, and a temperature of between 80° and 90° , sometimes certainly running up to the hundreds, can usually be relied on from September to March. Inland the heat, though very great, is not unpleasant because of its dryness, but in the tropical coastal belt, the rainy months bring with them a humid atmosphere which is distressing to Europeans—at any rate to those recently arrived in the country. The winter climate is delightful. Balmy days, with cool and in some localities frosty nights prevail, and on the range about Toowoomba the salubrious nature of the meteorological conditions is universally recognised, while even at Herberton in the north the altitude of the plateau on which the town is situated renders the climate most invigorating. For the purposes of classification the climate of Queensland may be divided into three sections:— (1) Coastal, with even temperature and comparatively high humidity, (2) Central, on the inland side of the Main Range, where temperature and humidity have a wider range and where extremes of heat and cold are more marked, (3) Continental, in the far western districts, where the summer heat and winter cold are intense, while the range in humidity is varied though often showing very dry atmosphere. Some figures for typical stations in these divisions may be quoted:— Rockhampton (Coastal), mean maximum 82° , mean minimum 63° . Townsville (Coastal), mean maximum 81° , mean minimum 69° . Hughenden (Central), mean maximum 89° , mean minimum 60° . Thayomindah (Continental), mean maximum 82° , mean minimum 57° . Cloncurry (Continental), mean maximum 89° , mean minimum 64° .

The rainfall shows the same variation as does the climate. Along the coast it is comparatively, high more

1.1m	1.2m	1.3m	1.4m	1.5m	1.6m
------	------	------	------	------	------

4

2

1

particularly in the tropical districts where the total fall averages between 60 and 70 inches annually. The total fall ranges from 58 inches at Brisbane to 76 inches at Mackay and 74 inches at Thursday Island. Across the range the fall lessens gradually to the westward, Cambooya getting 34 inches, Hughenden 20 inches and Boulia 12 inches. The wet season sets in about February and lasts through that month, March and part of April, but thunderstorms in the early summer months are often responsible for a considerable augmentation of the yearly records.

POPULATION.

Queensland must be reckoned among the sparsely populated States of the Commonwealth though her average per square mile is not so low as that of either South or Western Australia. But while Victoria supports nearly 14 people to the square mile and New South Wales $4\frac{1}{2}$, Queensland cannot boast of an integer in her figures, though her productive capacity is certainly just as potential. The reason for this is of course the fact that a great part of the State is still devoted to pastoral pursuits which, while requiring large areas for the occupation of stock only support comparatively few individuals. Furthermore the northern parts of the State, with its intense summer heat and other tropical conditions do not present many attractions to Europeans as eligible localities for settlement. But, at the same time it cannot be denied that a very large portion of the State suitable in every way as regards conditions of living etc., is still very far from being effectively occupied, and that Queensland, in common with the rest of Australia, could support an universally greater population than she has at present. The population, on the 31st Dec. 1903 was estimated at 515,530 persons exclusive of aborigines, an increase of only 672 on the total for the preceding year. This population is very unevenly distributed, the bulk of it being contained in the Southern division of the State, where over 60 per cent of the aggregate is located, leaving about 13 per cent for the Central and 22 for the Northern Divisions. The centralisation of the population in large urban areas, so characteristic of Australian settlement, is principally responsible for this disproportion, and the presence of Brisbane, Ipswich and Toowoomba and other large towns accounts for the preponderance of the South. Ninety five per cent of the population is of European extraction, the remaining 5 per cent representing the coloured aliens, of

which Chinese and Pacific Islanders, the latter imported for work on the sugar plantations, form the greater number. According to the census returns of March 31st 1901, the birthplaces of the people were as under:—

Queensland	282,861
Other Australian States	38,050
New Zealand	1,571
United Kingdom	126,159
Other British Possessions	2,737
German Empire	13,166
Denmark	3,161
Sweden and Norway	2,142
United States of America	1,315
Chinese Empire	8,472
Other Countries	15,962

The large total under other countries is attributable to the inclusion therein of the Pacific Islanders, who numbered 9,327 on that date. The large number of Germans in the State has always been considered a source of strength to Queensland, people of that nationality and their descendants admittedly making excellent colonists.

CONSTITUTION.

The constitution of Queensland is similar in all important principles to that prevailing in the other provinces of the Australian Commowearth. The executive functions are carried out by the Governor, appointed by the Imperial authorities and an Executive Council of seven salaried ministers with a Vice President (usually, but not invariably, the Premier). The Legislature consits of two Houses — the Upper being the Legislative Council and the Lower the Legislative Assembly. Members of the former are appointed for life by the Governor, and are presided over by a President elected by the Governor. The number of Legislative Coun-
cillors is not limited, but members must be over twenty one and natural born or naturalised British subjects. There is no reimbursement of members, but a free railway pass is issued to each from the date on which they are sworn in. There are sixty-one electorates for the Lower House, returning seventy two members from 11 double and 50 single consti-
tuencies. Members must be qualified at voters, the franchise being a residential and property one. The duration of Par-
liament is limited to three years and members receive £ 300 per annum and a railway pass, in addition to travelling expenses to and from the place of nomination in the electo-

rate. The suffrage has so far not been extended to women. The establishment of the Commonwealth has emphasised the necessity for the reduction of members, and it is not unlikely that before the termination of the present Parliament, a bill for constitutional reform will be brought in by the Government.

EDUCATION.

The State has undertaken to a very large extent the primary instruction of children in Queensland, and furthermore assists materially in the secondary stages. "Education — free, secular and compulsory" has been a cherished principle of the community since the sixties, and the national school system at the present day is one of which the people are decidedly proud. There are three descriptions of primary schools in Queensland — State, Provisional and Special Provisional, the latter being designed to supply the wants of districts too thinly populated to support a Provisional School. Wherever possible, attendance is enforced, and attendance officers have been appointed to ensure the observance of the compulsory clauses of the Act. The subjects taught are those usually chosen for a sound education, and include, reading, writing and arithmetic, geography, history and English, while the higher mathematics, the rudiments of science, music and drawing are also imparted. Secondary education is provided for by the establishment of Grammar schools (six for boys and four for girls) in the principal towns. These Grammar schools are liberally subsidised by the State, which in addition awards a certain number of scholarships and bursaries for attendance thereat to pupils of the primary schools. The educational standard of the Grammar school is a high one and a thoroughly sound education is imparted, based on the usual subjects of classics, mathematics, modern languages and science. Queensland does not yet possess a University despite persistent agitation to that end, but the Government every year grants three scholarships to either male or female students, the successful competitors being entitled to receive £ 100 per annum for three years at any approved university. There are a considerable number of private schools in Queensland, some of which are denominational in character. Private schools may be included in the regular inspections accorded to State schools, and to such scholarships are granted under the same conditions as apply to the primary schools. Several Technical Colleges are in operation throughout Queensland

and are all well patronised by such as desire instruction in the arts and crafts. For the purposes of general education and improvement, Schools of Art have been established in all towns of any importance, and the libraries and reading rooms in connection with such institutions are assisted by Government endowment.

There are over a thousand State and Provisional Schools in Queensland, and during the year 1903 a total of £ 277,786 was expended on primary education, and £ 7,168 on technical instruction, besides large sums on secondary education and Schools of Art. The scholars enrolled at primary schools number about 110,000, at Grammar schools 1,000, and at private schools 15,000.

RELIGION.

As in all the rest of the Commonwealth there is no State religion in Queensland, the system of State aid, inherited from New South Wales, being abolished in 1860 shortly after the assembling of the first Parliaments, the future payments being limited to such clergy as were then in receipt of them. The religion with the greatest number of adherents is the Church of England (37.5 per cent), Roman Catholics coming next with 24.6 per cent. Then follow Presbyterians (11.7 per cent), Wesleyan and other Methodists (9.5 per cent), Baptists (2.6 per cent), Congregationalists (1.7 per cent), Jews (0.2 per cent), all other denominations accounting for 12.2 per cent. There are five Church of England dioceses under Queensland jurisdiction, namely, Brisbane, Rockhampton, North Queensland, Carpentaria and New Guinea. In the Brisbane diocese there are 50 parishes, 114 churches, 58 clergy and 20,140 sittings. The figures for the other dioceses are:— Rockhampton, Churches 20, clergy 14. North Queensland, clergy 18, lay readers and missionaries 31, Parishes and mission districts 20, Church members 20,000. Carpentaria, clergy 6, Lay Readers and Missionaries 4, Churches 8. New Guinea is almost entirely a mission field. There is a Roman Catholic Arch-diocese in Brisbane with 31 districts, 82 Churches, 25 Religious Brothers and 56 secular Clergy, a diocese at Rockhampton (16 districts, 24 priests and Vicariates at Cooktown and New Guinea). The Presbyterian Church of Queensland formed in 1863, consists of five Presbyteries:— Brisbane, Toowoomba, Maryborough, Rockhampton and Townsville, having altogether 48 charges. There are five districts — Brisbane, Downs, Wide Bay and Burnett, Central and

Northern — for the Australian Methodists with 184 churches, 59 ministers and 37,814 adherents. Associated with the Baptist denomination is the German Baptist Conference of Queensland, while the United German and Scandinavian Lutheran Synod of Queensland has 14 ministers on the roll. There are 27 churches and 26 other preaching places for the Queensland Congregational Union, and other sects are well represented.

FINANCE.

Prior to the establishment of the Commonwealth, Queensland drew most of her revenue from the imposition of customs and excise duties from territorial taxation (rents, etc.), and receipts from the railways. Since the imposition of the Federal Tariff, however, it has been found necessary, in view of the decline in the returns from the Commonwealth, to institute direct taxation in the shape of a land and income tax. Of recent years the drought has had a markedly serious effect on the revenue, which fell from £ 4,096,290 for the financial year 1900—1, to £ 3,535,062 for 1901—2. The contraction continued throughout 1902—4, though not to so great an extent. For the financial year 1903—4, when the total revenue amounted to £ 3,595,440, the chief heads of revenue were: Commonwealth returns £ 810,855, Railways £ 1,296,961, Lands £ 637,080, Taxation £ 475,184, Other Sources £ 375,360, with a per capita average of £ 6.18.1. The State expenditure for the same period was £ 3,607,864, the total deficit being £ 12,424. The principal heads of expenditure for the year were, Interest and other charges on Public Debt £ 1,547,331, Railways and Tramways £ 810,251, Public Instruction £ 314,399, All other Sources £ 935,883. The Land and Income tax is expected to yield a material addition to the yearly revenue in future years.

There are altogether eleven Banks of issue doing business in Queensland, and of these the Queensland National Bank, the Royal Bank of Queensland and the Bank of North Queensland are local institutions with local directorates, the rest having their head offices elsewhere. Since the salutary lessons of the 1893 crisis, banking business in the State has been on financially sound lines, and despite the drought troubles which substantially curtailed receipts, the three local banks all maintained their position during the severe season of 1902. For the June quarter of 1904 the total liabilities of all banks in Queensland amounted to £ 12,693,759, and the total assets to £ 16,653,990. There is a Government

Savings Bank, and the amount of deposits and the number of depositors show satisfactory increases from year to year. In 1903—4 there were 80,059 depositors with a total of £ 3,741,967, the average amount per depositor (£ 46.14.9) surpassing that of any other Australasian State. The total deposit gives an average per head of population of £ 7.3.9.

COMMERCE AND SHIPPING.

Queensland's imports are mainly the manufactured articles which as yet she is not able to produce within her own borders, or the raw material which is not procurable in the State itself. Clothing and textile fabrics, boots and shoes, apparel and drapery, hardware, groceries and oilmen's stores, jute goods, wines and spirits, ale and beer, tobacco, kerosene, mining and agricultural machinery, iron and steel, paper and other articles, all figure largely on the list of imports, and for the most part are likely to do so for many years to come. Supplies are drawn from all parts of the world, but the principal countries whence the trade comes are Great Britain Germany, Canada and the United States of America, in addition of course to the other States of the Commonwealth. The Federal Tariff placed Queensland in rather a worse position as regards the amount of her Customs dues than she was under her own fiscal policy which was strictly a revenue one, instead of having a more or less protective incidence. The principal exports of the State are pastoral products, a list of which and their values is given under the heading "Pastoral", others are Sugar, Gold, Fruit, Pearl-shell, Copper and Tin.

The value of imports for 1903 was £ 6,731,207, and of the exports £ 9,514,974, so that the output satisfactorily exceeded the value of the supplies drawn from beyond the borders.

Queensland is well supplied with ports and harbours, most of which however, have necessitated the spending of large sums on improvements. The principal port is of course Brisbane which, though not a port for the great ocean lines of mail steamers, is yet visited by many of the largest cargo steamers trading to Australia. The river has been dredged out to a depth of 26 feet, and vessels of 6,000 tons can now be brought up to the city wharves. The Government has built wharves at Pinkenba, at the mouth of the river and it is customary for the larger steamers to discharge and take in cargo there. Pinkenba is reached by train from Brisbane, the rails running right on the wharf.

Depths to over 30 feet are obtainable from the roadstead to Pinkenba wharf. At Townsville an artificial harbour has been constructed at the mouth of the insignificant Ross Creek, and large steamers which formerly had to lighter in the roadstead, now go right up to the breakwater. Gladstone has an excellent natural harbour, shipping facilities being quite adapted to the the loading and discharge of large steamers, and at Bowen a long jetty obviates the difficulties of a shallow foreshore. Rockhampton, Maryborough, Bundaberg, Mackay, Cooktown, Normanton and Burketown are other ports of call for a frequent coastal service.

For 1903 the vessels entered and cleared at Queensland ports aggregated a tonnage of 1,798,455.

MINING.

Though still comparatively speaking a young country, Queensland has made great strides forward in the mining industry, and despite the fact that her mineral resources have so far certainly not been adequately exploited, the State has established an inevitable reputation for herself as a mineral producer, and she owes much to her metalliferous wealth as regards her present day position. So far gold of course, comes first in any consideration of the mining industry of the State. Auriferous districts cover a considerable area in Queensland, amounting to about 32,000 square miles and running practically along the whole of the Eastern Division from north to south. The principal fields with their characteristics are as follows:—

Gympie, the second field proclaimed in Queensland in 1867. At first alluvial, Gympie has for years been a reefing field, and on some of the lines of reef the gold-bearing quartz has been found to be very rich, while the deep level mining, at present profitably carried on by the various companies, has prolonged the life of the field indefinitely. Some of the mines, such as the Scottish Gympie, Glanmere and Montsland, No. 2 South, Great Eastern, and South have taken out quartz, which in diggers parlance has consisted of regular "jewellers' shops", so thickly has it been incrustated with the precious metal. Gympie is only about a hundred miles from Brisbane by rail and affords the visitor an excellent opportunity for learning something about the mining of the State.

Mount Morgan, one of the most wonderful gold mines not only in Australia but in the world, is 28 miles S. S. W. of Rockhampton, from which town a railway runs to the

field. Gold occurs here in a unique formation:— "mass of drusy ironstone and siliceous scinter" thickly impregnated, and practically the whole mountain is worth quarrying and crushing for gold. The reef itself is 500 feet long by 200 feet wide while its depth is unknown. Until 1900, in which year it produced gold to the value of over half a million sterling, Mount Morgan had yielded a total of £ 9,516,694, and it is safe to say that the mine will last for very many years yet. Indeed its shares are considered excellent buying as investment stock.

Charters Towers. While Mount Morgan is the richest mine in Queensland, Charters Towers is the richest field of the group of mines included within the official area of the gold field yield of the State. The field is a reefing one, and remarkable for its deep sinking, depths exceeding 2,000 feet having been attained. The chief mines are the Day Dawn Block and Wyndham, Brilliant and St. George, New Queen, Queen Cross, Papuan and Queen Central. The works of the Day Dawn mine are spoken of as the finest in Australia. The town of Charters Towers is about 88 miles from Townsville, the Great Northern Railway running through the city.

Croydon is another reefing field situated in what is usually known as the Gulf country, 94 miles due east from Normanton. At the present time over 200 reefs are known to exist in the field, and the auriferous area worked extends over about 600 miles.

Other gold fields of more or less importance are the Palmer, Etheridge, Ravenswood, Coen Starcke River, and Hodgkinson, all in the north; Cloncurry, Grass Tree, Gladstone in central Queensland and Kilkivan, Eidsvold, Pikedale in the south. Most of these fields, particularly the northern group, have passed through a period of excitement and prosperity and have since settled down to the solid work of gold production with satisfactory results.

But it is not in gold alone that Queensland takes a prominent position as a mineral producer. Copper, Silver, Coal, Lead and other metals are all found within the State's boundaries and indications go to show that there is still very much to do in the way of exploitation. Fresh deposits of all these metals and minerals are continually being discovered and an optimistic expert would be inclined to pass most eulogistic opinions on Queensland's mineral deposits, and especially on those of the northern portion. Distant from the coast, lack of railway communication and the consequent difficulty of transport has so far militated

against the efficient development of these deposits, and until the railway system has been considerably extended, a definite idea of the mineral resources of the State, in respect to their commercial value at any rate, is unobtainable. Silver is chiefly produced from a group of mines known as the Herberton, Walsh and Tinaroo fields in the north of Queensland, but there is an extensive tract of argentiferous country round about Lawn Hill and Lilydale southward from Burketown, which however, is somewhat inaccessible, and in consequence its development has been retarded. Silver ore has also been found round Stanthorpe in the South Eastern Division near Ravenswood (N. Q.), Albion and Lappa Lappa (both in the Chillagoe district) and elsewhere.

Copper mining promises to become in the near future exceedingly profitable. Immense bodies of the ore are known to exist in the central and northern districts, and the mines in the Chillagoe and Cloncurry districts are especially prolific. The Cloncurry field in particular may be expected to outdistance all its competitors when the long deferred railway connection with the coast is accomplished. Copper has also been mined in the Clermont and Mount Perry districts further south.

The first tin field in the State was, as the name of the town denotes, discovered at Stanthorpe, where immense quantities of tin were taken out. Efforts to find the lode failed however, and tin is now chiefly produced from the Herberton, Walsh and Tinaroo fields, while encouraging reports have been received of deposits in other parts of the north of Queensland.

The coal measures of Queensland are only now beginning to receive the attention they deserve. The carboniferous areas are not only a vast extent but are widely distributed, a well known geological authority having given it as his opinion that the mineral exists from the south eastern corner of the State along the coast as far north as Cooktown, and also in the interior. The fields now in active operation are situated at Ipswich, Toowoomba (Gowrie), Burnum and Clement; and at Callide, 50 miles east of Gladstone, a 30 foot seam of coal free from bands has been cut, while the basin drained by the Fitzroy River covers a field of exceptional quality.

Many other metals and minerals of less importance commercially are mined in Queensland, and Wolfram, Bismuth, Antimony, Quicksilver, Manganese and other metals, all figure in the list of production. Opal of excellent quality is obtained from Fennoy on the south-western border to Winton in the north, while a variety of other gem stones and gems have also been

found. With a larger population, a closer network of road and rail, and a greater knowledge of her potential wealth, we shall probably within the next decade find Queensland forging ahead at a more accelerated pace and taking her place either at or near the head of the Australian States in the matter of mineral production.

AGRICULTURE.

The State of Queensland, extending over many degrees of latitude, presents a wide field to the agriculturist, offering him opportunities which it is not too much to say have not been adequately availed of. For almost the entire length of the State the coastal belt consists of admirable land, and in the northern division the scrub lands are exceptionally rich in composition. Across the range also, on the famous Darling Downs, the soil is eminently adapted for the growth of cereals, and large areas are now under wheat, 97 per cent of the total production coming from that locality. Between Brisbane and the main range and for many miles to the north and south, the State is closely settled with a prosperous farming and dairying community. From Toowoomba westward as far as Roma, the wheat growing area extends, and though Queensland is still an importer of breadstuffs, the time is not far distant when in this as in other respects she will produce more than is necessary for her own consumption.

Both in acreage and production the cultivation of maize is greater than that of wheat, climate and soil being especially suitable, particularly in the hot, moist atmosphere of the northern districts, though so far the great bulk of the maize comes from the southern portion, the north having only come into competition with it during the past few years. In the Southern division, besides wheat, maize and other cereals, fruit and vegetables are largely grown, the region around Stanthorpe being devoted to the fruits of a temperate clime, while at Roma and other places on the Downs, viticulture has been undertaken with most encouraging results. Tobacco is grown in the Texas district, near the southern border, and the Queensland Government has engaged a tobacco expert to advise the farmers and work generally for improvements in growth and the preparation of the leaf for market. But it is in what is generally termed tropical agriculture that Queensland especially takes the lead. Chief among the branches of this class comes of course sugar, which is really the State's staple crop. From Nerang on the southern border to Cairns in the north, large areas of

CANE HARVESTING WITH KANAKA LABOR,
QUEENSLAND.

the coastal belt have been found exceptionally suited to the growth of cane, and at Bundaberg, Mackay and in the neighbourhood of Cairns, centres of the industry have long been flourishing. The Government, by the Sugar Works Guarantee Act, render it possible for a community holding small areas to have a mill near at hand where their cane may be crushed. Advances for the purpose of erecting a mill, are made under the Act to a co-operative combination of the growers who mortgage their holdings to the Government in return. Interest and redemption are paid off in instalments, and the system has been found to work well. Until the advent of Federation, field work on the plantations was done by South Sea Islanders, but the Federal Parliament have enacted the gradual abolition of this class of labour and before very many years white workers will have taken their place. The Government have made sugar growing their special care, and recently engaged an expert, who under the title of "Director of Sugar Experiment Stations" instructs the farmers in the methods of irrigation, fertilisation and selection, so that they may get the best returns from their crop. Sugar growing presents many advantages to the prospective settlers. With a small holding he can earn a comfortable living, his cane is taken straight to the mill from the field, he gets the return for his labour expeditiously and the middlemen's charges are reduced to a minimum, or altogether eliminated. Land is cheap and easily obtainable and when once the heavy work of clearing it has been done, profitable results follow quickly. There is, it may be remarked, an increasing tendency towards the small holdings and Central Mill system, but round Bundaberg especially there are still some large estates left. Other tropical agriculture is not pursued as it should be. In the northern districts there are thousands of acres of scrub lands, perhaps the richest in the world from the point of view of agriculture, which have yet to be brought under tribute. Coffee, bananas and other tropical fruits flourish extremely well, and in the case of the former there seems every prospect of an early extension and development. The Government coffee expert has reported most favourably on the prospects of coffee growing, and though some time must elapse before the grower begins to get back his capital, the cheapness of land and the prolific crops which he eventually gathers more than compensate him.

As may be gathered from the foregoing, the Queensland Government made special efforts to further the claims of the agricultural community during recent years. Experts in Sugar growing, Fruit, Coffee, Viticulture and Tobacco have

been appointed and they are continually among the farmers explaining, instructing and advising. Seeds and cuttings of various kinds are distributed, and the dissemination of agricultural knowledge is obtained by the issue of a monthly journal. In addition an Agricultural College has been established at Gatton, where, on a farm of 1,692 acres, students are thoroughly trained in farm work of all descriptions and are grounded in scientific agriculture. Experimental farms have been established at Westbrook and Hermitage on the Darling Downs, Gindie and Biggenden in the Burnett district, and a State nursery at Kamerunga in the Cairns district. In 1901 Parliament passed an Agricultural Bank Act sanctioning advances to farmers for improvement or developmental work, on the security of their holdings.

For the year 1903 the acreage of the principal crops was as follows:— Sugar, 111,516 acres; Maize, 133,099 acres; Wheat, 138,096 acres; Potatoes, 6,732 acres; Oats, 2,808 acres; Hay, 78,393 acres; Gardens and Orchards, 12,873 acres; Barley (all descriptions), 22,881 acres. The total area under cultivation during that year was 566,589 acres.

PASTORAL.

The pastoral industry, which was the first to lift Queensland into prominence, still remains at the head of the list of wealth producers, and of the total value of exports the products of the pastoral industry such as wool, meat, tallow etc., account for more than half the value, or approximately about five millions out of nine. The whole of the interior of Queensland, on the western side of the main range is, practically speaking, suitable for stock raising purposes, and from the southern border right up to the Gulf of Carpentaria it is all under pastoral occupation. It is nearly all downs country, well supplied with nutritive grasses, and much of its extent within the artesian area, so that water is assured to the pastoralists even in the driest seasons. Sheep thrive on the inland pastures, and the wool there exhibits qualities which bring it into very keen request. Merinos form 96 per cent of the flocks of Queensland so that there are comparatively few of the coarse woolled descriptions, though the Lincoln cross is making headway. No sheep, worth speaking about are to be found on the seaward side of the main range, comparatively wet conditions and the presence of grass seed militating against success. There are some very big sheep stations in the western districts, carrying in good seasons enormous flocks of sheep, and though the drought of 1901—2

has had a very serious affect on the numbers, the future of the wool growing industry, with a return of good seasons and more attention given to the avoidance of overstocking, is decidedly promising. At the end of 1901 there were ten million sheep in Queensland and the production of wool for the 1901—2 season totalled nearly 120,000 bales. Frozen and preserved mutton bulks large on the list of exports, and the other products of the sheep likewise give profitable returns.

Queensland has always had the distinction of being the cattle State, her herds being greater in number than those of any other province in the Commonwealth, New South Wales not being excepted. The herd that is most favoured is the Shorthorn, a development of the English Durham. About 80 per cent of the Queensland cattle are Shorthorns and are certainly the finest cattle for general purposes. They develope early and grow to a large size—two very good points for slaughtering purposes. The Herefords form about 15 per cent of the Queensland herds, so that these two breeds may be considered the only ones in the State of any importance. The cattle stations are confined to no particular area, but are distributed all over the State, some of the inland stations carrying both sheep and cattle. Queensland exports far more frozen beef than any other State, while her hides are considered among the best and command top prices in the interstate markets. The Government supervises the export of all frozen produce, and meat, both for local and oversea requirements, is usually slaughtered under veterinary inspection. Though 1902 was a drough year the freezing establishments put through more cattle and sheep than they did in 1901, owing to the fact that owners preferred sending to the yards cattle they should under more favourable conditions have kept on the runs.

The breeding of horses has not had the attention it should have received, and though several fine strains have been introduced, carelessness has been allowed to develop with a consequent deterioration, which has been duly brought home to owners by the remarks of the experts buying horses for British Army remount purposes.

The numbers of live stock in Queensland at the end of 1903 were:— Sheep 8,392,044, Cattle 2,481,717, Horses 401,984; the figures for sheep and cattle showing a very material diminution on those for the preceding year. The chief items of pastoral produce exported during the same period may be summarised as follows:— Wool £ 1,867,652, Frozen Meat £ 829,671, Preserved Meat £ 96,495. Live stock, hides and tallow also figure considerably on the list of exports.

DAIRYING.

During the past few years the dairying industry has developed rapidly in Queensland. Hardly more than a decade ago Queensland was importing a considerable portion of her dairy products, while in 1901 the State was producing enough for home consumption and a balance for export amounting to over two millions pounds of butter and a quarter of a million pounds of cheese. Farmers on the coastal belt are finding most profitable returns from dairying, and though the drought worked havoc in 1902, a return of good seasons will undoubtedly occasion great expansion. The initiation of the central factory system and the invention of the cream separator has had much to do with the favour shown to dairying of late, and with these advantages the industry is certain to forge ahead in Queensland, and benefit a very large section. Already between Brisbane and the main range, are to be seen many flourishing dairy farms, and the pig raising generally carried on in connection therewith has brought Queensland hams and bacon into prominence throughout the Commonwealth. The ease with which maize is grown and the abundant yields of this cereal should result in a marked increase in this branch of the industry, when it has been reduced to more scientific methods than those at present in force.

In 1903 the total output of butter from an estimated quantity of about 30,000,000 gallons of milk was 7,717,000 lbs. of butter, and 1,480,000 lbs. of cheese. Hams and bacon amounting to 4,145,900 lbs. were also produced, the total value of products from dairy and pig farming for the year amounting to £ 646'000.

MANUFACTURES.

Queensland being a young province, it is not to be expected that her manufactures would show any abnormal development. Up to the present the attention of the community has been devoted to the development of the primary industries such as pastoral, agricultural and mining, and secondary production has been relegated, comparatively speaking, to the background. Within recent years however, there has certainly been a noticeable expansion in the manufacturing industry, though except in a few lines, matters have not reached an export basis. Of the exports in this connection the chief are those concerned with the products of pastoral and agricultural pursuits, such as frozen

and preserved meats and sugar. The output from factories (using the generic term) dealing with these two foodstuffs is considerably more than that from any other. Meat works, both for freezing or chilling and preserving, with all the by-products, have been established at many points from Brisbane to Burketown, and a brisk trade has for some years been in existence with oversea ports. Not only does Great Britain absorb a large amount of such surplus product, but the Far East has become a substantial customer, while during the war in South Africa the victualling of the British army at the front, set up a good demand, which has resulted in a considerable amount of business being transacted with that contry since the conclusion of peace. At all the centres of sugar production, especially Bundaberg, Mackay and the Johnstone River, sugar mills are at work, the output, beyond that required for local consumption being chiefly exported to the other states of the Commonwealth. Local requirements in the way of articles of food and drink, clothing and textile fabrics and other domestic needs, are largely met by Queensland factories, but importing is also depended on by the community to a greater or less extent.

At the end of 1903 the number of factories at work in Queensland was 2,001, the number of hands employed 19,286, and the total amount of capital invested £ 8,541,623.

SPORTING.

Horse Racing:— The usual sports of Australia are indulged in Queensland, the hot weather of the Northern districts having little or no effect upon the enthusiasm displayed by the votaries of the various pastimes. Horse racing is of course the principal sport, and the premier organisation in the Queensland Turf Club (office, Kents Buildings, Brisbane). The leading clubs, affiliated with the Q. T. C. are:— the Brisbane Jockey Club, Bundaberg Amateur Race Club, Central Warrego Race Club, Downs Amateur T. C., Gympie T. C., Ipswich J. C., Roma Amateur T. C., St. George R. C., Tattersalls Club, Toowoomba T. C., Warwick T. C., and Western Queensland R. C. A similar organisation exists at Townsville, controlling racing matters in the north. The headquarters of the Queensland Turf Club are at Ascot, the racecourse being about three miles from the city. The railway passes close to the grand stand and trains run right to the gates. The course and its appointments are excellent. It is oval in shape and about $1\frac{1}{4}$ miles in length, with a grand stand and leger enclosures. The totalisator, which is in use on race days is fitted with a most ingenious automatic

mechanism. The principal races of the Queensland Turf Club area the Derby ($1\frac{1}{2}$ miles), the Queensland Cup (2 miles), the Hopeful Stakes (5 furlongs), the St. Leger Stakes ($1\frac{3}{4}$ miles and 132 yards), and the Brisbane (Autum) Cup (2 miles). The race course of the Brisbane Jockey Club is situated at Albion Park, about a mile and a half from the post office, trains running to within a few hundred yards of the ground. Weekly race meetings are held there on Wednesdays or Saturday afternoons. Nearly every town in Queensland has its local club course, and the western districts especially among the pastoral population the sport is extremely popular.

Cricket and Football:— The Queensland Cricket Association is the chief body controlling the game, both local and interstate affairs being usually managed by them. A competition on the electoral system is conducted every season by the Association, 7 senior and 49 junior clubs being affiliated. For Football the Queensland Rugby Union system of football is in practice, altogether 29 teams being concerned. Branch Unions have been formed at other towns, to conduct the local competitions. Outside both the Cricket Association and the Football Union there are many clubs, which play matches throughout the year.

Aquatics:— Brisbane and other Queensland Towns have excellent facilities for aquatic pursuits such a bathing, rowing and swimming, all of which are largely patronised. The Queensland Rowing Association has affiliated with it the Brisbane Commercial, South Brisbane, Central Queensland, Rockhampton, Maryborough, Lakes, Creek and Wide Bay Clubs. The Queensland Yacht Club is the premier club as regards sailing, but there are in addition in Brisbane, the Flying Squadron, the Brisbane Sailing Club, and a Dingy Club, while in all the seaport towns of the north local clubs have been formed. In cycling there is the League and Southern branches, which looks after the sport from the professional standpoint, and the Queensland Cyclists Union of seven clubs, controlling the amateur cyclists. It must be understood that the foregoing remarks, while generally applicable to the whole of the State, refer particularly to Brisbane and the south, the central and northern towns, Rockhampton and Townsville having associations of their own, conducting local competitions etc.

Shooting and Fishing:— Good shooting and fishing are procurable in many parts of Queensland, the swamps and creeks of the coast supplying a sufficiency of wild fowl, while inland, kangaroo and wallaby shooting in addition is obtainable nearly everywhere. Under Parliamentary enactment it is a penal offence to shoot some

birds at certain seasons of the year, while others are protected throughout the year. The best sport is provided by black duck, geese, swans and other waterfowl, pigeons which abound in the scrub country on the northern rivers, plain turkeys, and brush turkeys, snipes and quail. The close season which is fixed by proclamation varies in different districts. The birds to which the Act applies all the year round are generally, all waders, and all insectivorous birds, including brown hawks and native companions. The rivers on the eastern seaboard and the coastal waters generally provide excellent fishing; jew, schnapper, bream, whiting, flathead, garfish and many other edible varieties are always to be caught, while on the Fitzroy the gigantic perch and the barramundi provide excellent sport. The inland waters are also well supplied with fish.

RAILWAYS.

Queensland differs somewhat from the other States of Australia in the matter of her railways, in that her systems do not all centre in the metropolis. The progress and method of settlement in Queensland did not radiate from one point, but instead the pioneers found, when on their new ground, that a port for their produce was necessary considerably nearer than the capital. Consequently Rockhampton, Townsville, Cooktown and the gulf ports Normanton and Burketown were opened up, and when the back country was sufficiently developed, railways running from these towns inland followed as a matter of course. As a result, at the present time there are no less than seven distinct systems having no connection one with the other. These are — the Southern and branches, the Central, Mackay, Bowen, Townsville, Cairns, Cooktown and Normanton lines. Of these however, only the Southern, Central and Townsville are of any importance, the total mileage of each of the others being less than 100 miles. Indeed, from motives of economy, the State found it necessary to close the Bowen line (48 miles) in 1902, and at present it is being run by a private company. The connection of the Southern and Central systems via the North Coast railway has recently been completed, and it is now possible to travel from Cunnamulla, 604 miles from Brisbane in the south western division, to Longreach, 804 miles from Brisbane in the central division, or nearly 1,500 miles without leaving the railroad. Naturally the most important systems are the Southern and Western, which have their terminal stations at Brisbane, and from which radiate 1,523 miles of the total

of 2,803 miles controlled by the State, or in other words more than half the mileage. The longest and most valuable of the lines ending at Brisbane are the Western and South Western. As far as Toowoomba, 101 miles, these lines run on the same trunk railway, to the top of the range. A few miles on the westward side of Toowoomba the South Western line branches off towards the southern boundary of the State, passing through Warwick and Stanthorpe and other towns until it junctions with the New South Wales Northern line at Wallangarra, 233 miles from Brisbane. Branch lines from this main route at Wyreema to Pittsworth, at Hendon to Allora, and at Warwick to Killarney. All these lines feed rich agricultural districts and in addition the Killarney Branch offers the traveller an ever varying panorama of scenic attraction. The Great Western Railway runs from Toowoomba almost due west in almost perfectly level country, through Dalley (153 miles), Roma (318 miles), Mitchell (372 miles), Morven (427 miles) and Charleville (483 miles), when it turns sharply to the southward and terminates at Cunnamulla, 604 miles from Brisbane. Throughout almost its entire length the line traverses excellent pastoral country, all under profitable occupation, while as far as Mitchell wheat growing is also undertaken with encouraging results. On the seaward side of the dividing range from the southern boundary to Gladstone, the country is comparatively well served by railways. From Brisbane a short system runs to Nerang close to the southern border along the coast, from which an extension to the mouth of the Tweed River, right on the boundary line, has recently been completed. This system includes a passenger carrying line to Cleveland, 23 miles, through several sea side resorts on the shores of Moreton Bay, and also a branch to Beandesert in the heart of the rich agricultural district. Before reaching Toowoomba the main trunk line throws off at Ipswich two "cockspur" lines to Esk and Toogoolawah and to Dugandan, both the centres of agricultural districts. The North Coast Railway runs northerly from Brisbane through Gympie (106 miles), Maryborough (167 miles), Bundaberg (221 miles), to Gladstone and Rockhampton. Branches leave the main line to Kilkivan and Wondai, Delgibo (46 miles), Pialba, the seaside resort for Maryborough, Cordalba (16 miles) and Mount Perry (669 miles). The country through which the main line and its branches pass is partly agricultural, the rich sugar lands of Bundaberg being the chief centre; and partly mineral, with the oldest goldfield in the State at Gympie, abundant coal measures at Burrum near Maryborough, and copper deposits at Mount Perry, while from

**HORSESHOE BEND, CAIRNS RAILWAY
QUEENSLAND.**

Gladstone a couple of private lines are projected to tap the copper country at Glassford Creek, and the Callide Creek coal measures. At present a steamer carries the passengers and mails from Gladstone to Rockhampton where the central system terminates. From Rockhampton the line runs due west, serving pastoral country for the most part through Emerald (164 miles), Alpha (272 miles), Barcaldine (358 miles) to Longreach, the present terminus. Branches diverge to Mount Morgan, the richest gold mine in the State, to Springsure and to Clermont which serves as head quarters for gold, coal, and copper mines. The Northern system of railways starts from Townsville, running westward through Charters Towers, the most important gold field of the State, Hughenden (256 miles), to Winton 368 miles from Townsville, both of the last named being the entrepôts for extensive pastoral districts. A branch line running from Hughenden to Richmond has also recently been opened. A short line diverges to Ravenswood, 78 miles from Townsville, and another branch is under construction to Richmond. Short lines run inland or along the coast at Mackay and Cooktown, the latter terminating at Laura, 67 miles from the coast. From Cairns a railway starts inland surmounting the Main Range through picturesque scenery to Mareeba (46 miles), where a private line extends to Nungarra on the rich copper fields of Chillagoe. A line from Mareeba to Atherton has been added during 1904. From Normanton a railway has been constructed to Croydon a mining town 94 miles away.

The railways of Queensland are all built on the 3 ft. 6 in. gauge which has been found to answer admirably, the loss in speed being more than compensated for by the decreased cost of construction, working and maintenance. On the 30th June 1904, there were 2,928 miles of line opened for traffic at a cost of construction and equipment of £ 20,887,585. The total earnings for the year were £ 1,305,552, and the working expenses £ 811,951. 4,144,314 passengers were carried and 1,572,226 tons of goods and live stock. The passenger coaches on the Queensland railways are comfortably furnished, lavatory carriages both first and second class being used on all the long distance runs, while sleeping cars are attached to the trains which run through the night to the inland termini. The narrow gauge prevents the same elaborateness as obtains in New South Wales and Victoria in the matter of passenger carriages, but travellers along the Queensland lines, except in the hot weather, will experience a sufficiency of comfort. The refreshment rooms established at several

stations are not particularly good, except in one or two instances, and the meals etc. prepared for passengers compare very unfavourable with those on the New South Wales and Victorian lines.

It should perhaps be mentioned in conclusion that Queensland has departed from the usual principle of making the railways within her boundaries a State monopoly, and Parliament has sanctioned the construction of several lines to be built by private enterprise, for the purpose of opening up the mineral areas to a greater extent than the State could undertake. Of such lines the only one now open for traffic is that belonging to the Chillagoe Railway and Mines Company, 101 miles long, which besides connecting a valuable mineral area with the coast, passes through country capable of close settlement.

BRISBANE.

Brisbane, the capital of Queensland, and an episcopal city, is situated on both sides of the river, of the same name and about 25 miles from Moreton Bay (12 in a direct line), in latitude $27^{\circ} 28' S.$, $153^{\circ} 7' E.$ long. (Distance from Sydney by sea 503 miles.) It owes its origin to the fact that 1824 Sir Thomas Brisbane, the then Governor of New South Wales, ordered the establishment of a convict settlement there, and for the next twenty eight years it was cramped and hampered by the stain and drag of convictism. No attempt was made to encourage either settlement or trade, and it was not till 1840 that the embargo was removed and, with the withdrawal of the convicts, Brisbane really began its progress. At that time the Moreton Bay Settlement, as it was termed, was but an insignificant village, the only one in what is now the State of Queensland, and from these humble beginnings has sprung, in the comparatively short space of sixty years, a city which in general appearance, size and population stands fourth on the list of Australian towns. It will of course be readily understood that so young a city does not exhibit the same substantial character as does Sydney for example, but the public buildings, business houses, and some of the private residences compare favourably enough with those in the Southern city. The sub-tropical climate necessitates moreover, the construction of a different class of buildings to those generally in vogue in the more temperate climates, and the bungalow character of the suburban villas is noticeable.

Brisbane is admirably situated both for commercial and residential purposes. The river has been dredged and otherwise improved until it has been made possible to bring the largest steamers up to wharves in the centre of the city, and the tortuous course of the stream (minimised by the cutting away of the more prominent points) gives a great extent of available waterway. The different peninsulas which occasion the windings of the stream are mostly high ground on the land side, sloping gradually down to the river level. It is on these higher localities that the residential areas of the city have for the most part been formed, and the suburbs, while in places they are below flood level, are generally speaking well out of reach. The centre of the city, or North Brisbane as it is called, is well planned, the streets running at right angles; but the principal thoroughfares are somewhat narrow and there is within the boundaries little room for expansion, the ground rising abruptly from Queen Street (the chief business street), and the river washing the two sides of the peninsula. What expansion in the business portion has taken place has been towards the sea, through Fortitude Valley, and it seems inevitable that in future years the centre of business activity will slowly shift its position down the river. In the matter of suburbs, the expansion has been in all directions and as the residents are, by reason of the warm climate, anxious to each live in a house standing in its own ground, the area covered by the environs is considerable.

Area, Streets, etc.:— Including parks, the area of the municipality is 1,537 $\frac{1}{2}$ acres, the number of occupied premises within that area being 6,528 and the number of ratepayers 7,233. The capital value of the city property is £ 5,881,846, and the receipts from rates, etc., in 1902, was £ 80,848. The city is divided into seven wards:— North, West and East, Fortitude Valley, Kangaroo Point, Ciptra and Merthyn Wards, and elects every two years, fourteen aldermen. The total length of the streets in the municipality is 52 $\frac{1}{2}$ miles, the principal ones being Ann, Adelaide, Queen, Elizabeth, Charlotte, Mary and Alice Streets, running from north east to south west, and William, George, Albert, Edward, Creek and Wharf streets intersecting these at right angles. Queen Street is the principal thoroughfare, and is wood blocked for the whole of its length. The city is well lighted by gas, but a proposal to substitute electricity for the older form of lighting has already been discussed and the work will probably be undertaken shortly. Connected by the Victoria Bridge with the municipality of Brisbane is the municipality

of South Brisbane, a populous borough which has a capital value of £1,416,943 and an annual revenue of £26,005. The length of the roads and streets within the municipality of South Brisbane is 73 miles. The population of Brisbane within a ten mile radius of the General Post Office was, according to the census taken on December 31st 1903, 124,463.

Climate. Though undoubtedly hot in summer, the climate of Brisbane for quite six months of the year is really delightful. In the summer months the temperature is high, but consistently so, and there is a total absence of the hot winds and the consequent drop in the thermometer, which makes the southern capitals so unpleasant. Instead, the sea breeze which springs up in the forenoon, renders conditions bearable, and indeed thunderstorms are of frequent occurrence in the afternoons, and the "clearing of the air" cools the evenings. The thermometer from October to February remains during the daytime somewhere in the neighbourhood of the nineties with an infrequent rise to 100°, but the mean maximum is about 77° and the mean temperature for the year is a little over 68°. In the winter months the meteorological conditions of Brisbane could hardly be improved upon. The mean temperature during the real winter months of June, July and August averages about 69°, the days being balmy with clear skies and warm sunshine, while the nights are frosty and bracing. A dull or rainy day in winter is a rarity and for six days out of the seven the conditions are all that could be desired. The rainfall of Brisbane averages 50 inches, with a total of days on which rain falls aggregating about 100, but the real wet season is during February and March, which the high temperatures combined with the humidity of the atmosphere tends to make the most objectionable part of the year.

Arrival. Brisbane is approachable either from the landward or seaward side. The mail train, which junctions at Wallangarra with the New South Wales train, arrives at the Brisbane Central Station at 9.20 p. m. Cabs and other vehicles are always in attendance, and the station is within easy distance of all the leading hotels and boarding houses. Several of the former have their own runners to meet the train, and luggage vans are in attendance to take charge of their patrons belongings. Steamers from the south proceed round Cape Moreton, whence the journey across Moreton Bay and up the Brisbane River takes about five hours. The banks of the stream are thickly studded with villas, and many pretty landscapes are visible from the ship's deck. The wharves for coastal steamers and for some of the over-

sea vessels are right in the centre of the town, and a drive of at most ten minutes suffices to bring the passenger to his hotel. The larger oversea vessels berth, as has been said, at Pinkenba, at the mouth of the river, whence a train journey of from half an hour to forty minutes brings the traveller to the city. Customs officials are stationed at Pinkenba and board all steamers on arrival. Passengers' luggage may be passed on board. Quarantine regulations are under the administration of the Department of Public Health, the Quarantine Station being located at Peel Island in Moreton Bay.

Railway Stations. The Central Railway Station, recently completed, is a substantial looking structure in Ann Street, carefully designed to meet all passenger requirements and having wide platforms covered with a lofty semicircular glass roof. Most of the long distance and suburban traffic to the north, south and west starts from this station, which can be reached either by walking (5 minutes from Queen Street) or by tram (fare 1d.). For the lines which come under the general heading of the South Coast system, Melbourne Street, across Victoria Bridge on the south side of the river, is the terminus, but the traffic which centres there is inconsiderable.

Tramways, etc. The electric tramways of Brisbane, in the hands of a private company, are excellently managed and a most efficient service is maintained with the different suburbs. Brisbane is most advantageously built for such service, the various environs being evenly distributed in all directions round the central portion of the city, so that a tram coming in from one suburb can continue its journey right out to the other side of the town without stopping to shunt. In this way it may be readily understood that a maximum of efficiency is maintained with a minimum of rolling stock. The Eastern and Western suburbs and the Northern and Southern (to generalise somewhat) are thus in direct connection, and it is possible to travel from one side of the city to the other without changing cars. The sectional system of fares has been adopted, and the customary charge for the through journey is threepence. Trams have their destination plainly displayed on the front and sides, and at night the routes are distinguished by different coloured lamps. The cars themselves are of various kinds and it has become quite a popular recreation to hire one of the big open "summer cars" of the Company for a trip (especially on summer evenings) along the several city and suburban lines. The central section of the system is in

Queen Street, cars for the Western and North Western suburbs junctioning it at George, Edward and Wharf Streets, while the continuance of the section at both ends of the thoroughfare carries the traffic to the South Brisbane and Fortitude Valley subsidiary systems, with their offshoots.

Cabs and other vehicles also ply for hire at fixed rates.

Hotels, etc. The principal hotels in Brisbane are the Gresham (corner of Adelaide and Creek Streets), Lennon's (George Street), Imperial (George Street), National (Petries Bight), Hotel Cecil (George Street), Longreach (North Quay). The tariff varies from 10/6 to 15/— per day, with of course higher charges for special suites. There are several family boarding houses, notably Gowrie House, The Union Club, Netheway, Riviera and The Mansions, at which good accommodation can be secured at rates up to £ 2.2.0 per week.

Brisbane is rather badly off for restaurants and eating houses of the better class. All the hotels serve meals à la carte at prices ranging from 1/— to 5/— (excluding wines). For light luncheons and dinners, Eschenhagen's Café in Queen Street is very popular, and a kiosk in the Botanic Gardens is also well patronised, meals at a moderate charge being served in the open air.

For afternoon teas Eschenhagen's Café and the Ascot Tea Rooms are most frequented, but refreshments served are not above a very ordinary standard.

Public Buildings:— The Brisbane Town Hall has long been a reproach to the progressiveness of the city, and though several efforts have been made at various times to secure the erection of a building more suited to the importance of Brisbane, nothing definite has, as yet, been decided upon. The present Town Hall is in Queen Street, between George and Albert Streets, and its exterior is not of such a nature that would enable a visitor to single it out as a building of any importance. Indeed the letting of the ground floor as shops and offices inclines one unaccustomed to the city to class the building at first sight as ordinary and rather antiquated commercial premises. The interior is in keeping with the exterior.

The Treasury, occupying the block bounded by Queen, George, Elizabeth and William Streets, and which also accommodates a number of Departments of the State Public Service, is among the most imposing buildings in the city, its outline being broken by facades and colonnades which add greatly to its architectural lines and reflect credit on designers and artisans alike. The building is still uncompleted, there being a break in the rectangle on the

George and Queen Street corner, but when this gap is filled in, in acceptance with the original design the structure will be one of the finest in the Commonwealth.

Custom House. At the other end of Queen Street is the Custom House, an ornamental structure (three stories high) surmounted by a dome, a very prominent landmark to anyone approaching the city by way of the river.

The General Post Office, in Queen Street, is another building which might certainly be said to be behind the times, although as regards internal arrangements the best facilities obtainable under the circumstances are afforded to the public. The building itself is in Queen Street, between Creek and Edward Streets, the Postal and Telegraphic sides being separated by a narrow lane leading through to Elizabeth Street.

Parliament House, to which a new wing has in recent years been added, is both in its exterior appearance and interior appointments one of the finest, if not the finest building in Brisbane. It stands at the end of George Street overlooking the Botanic Gardens, and its solid but withal handsome front is carried up into two subsidiary and one central dome. Not the least noteworthy feature of Parliament House is its library, an exceptionally well chosen collection of books, in the selection of which strict attention has been paid to the reference requirements of the legislators who are likely to use them.

The Law Courts are contained in a handsome building in George Street, situated in a well kept garden which has been planted with trees and shrubs. Both Supreme and District court business is conducted here. The building is of cruciform shape with three arms, each of which is occupied by a Court situated on the first floor, the ground floor being occupied by the offices appertaining. A lofty dome surmounts the edifice.

Other Public Buildings are the Surveyor General's Department, the Department of Agriculture, William Street, the Lands Department, George Street, the Police Court (Elizabeth Street), the Post Offices (Edward Street), and the Immigration Department, Kangaroo Point.

The Observatory, dominating the whole city from the heights of Wickham Terrace, is a relic of the old convict days, when it used to serve as a windmill for grinding the prison fare. It has now been converted into a signal station, and from its gallery a very fine view of the city and suburbs may be obtained.

Many of the banks, insurance offices and business houses are located in buildings worthy of the city. Among the most notable of such buildings are those of the Queensland National Bank (Classic Italian), London Bank of Australia, Australian Joint Stock Bank, Australian Mutual Provident Society, and the Colonial Mutual Insurance Society, the Brisbane Newspaper Company, and several wholesale and retail houses.

Victoria Bridge. The municipalities of North and South Brisbane are connected by a massive, and at the same time elegant steel and iron bridge. Until 1893 the river was crossed by an iron swing bridge on the lattice girder principle, but the disastrous flood of that year swept it away, and it was replaced by the present structure which was completed and opened for traffic in 1897. The new Victoria Bridge consists of six 170 feet steel spans carried on five piers of cast iron cylinders, sunk to bed rock and filled with concrete. There are two carriage ways of twenty four feet each and two footways each nine feet wide. The total length of the bridge is 1,040 feet and the width between parapets 73 feet. The cost of the whole exceeded £ 110,000.

Banks. Australian Joint Stock Bank, Queen Street; Bank of Australasia, Wharf and Queen Streets; Bank of New South Wales, George and Queen Streets; Commercial Banking Company of Sydney, Creek and Queen Streets; Commercial Bank of Australia, Queen Street; English, Scottish and Australian Chartered Bank, Queen Street; London Bank of Australia, Creek and Queen Streets; Royal Bank of Queensland, Queen Street; Queensland National Bank, Queen and Creek Streets; Union Bank of Australia, Queen Street.

Consulates:— Belgium; Denmark; France; German Empire; Italy; Netherlands; Norway; Portugal; Spain; Sweden; Switzerland; United States of America. The consulates of Austro Hungary, Columbia, Liberia and Russia are under the jurisdiction of the consuls in Sydney or (in the case of Russia) Melbourne.

Churches. Brisbane is well supplied with places of worship, the various denominations being represented by buildings of an ornate or substantial character quite in keeping with the architecture of the town. These remarks do not however apply to the Anglican pro-Cathedral (St. Johns) which is situated between William and George Streets opposite the public library. The building is old and hardly in keeping with its dignity. Plans for a new and more suitable edifice have, however, been prepared and the

foundation stone of the new cathedral was laid in 1901. St. Johns however, has a fine peal of bells hung in a belfry adjacent to the church. The Roman Catholic Cathedral in Elizabeth Street, is a well designed and well furnished building with a bell weighing two tons, said to be the largest in the Australian Commonwealth. The Wickham Terrace Presbyterian Church is a modern structure with a fine exterior, and the Wesleyan Church in Ann Street is possessed of both a lofty spire and a fine organ. All Saints (C. of E.) in Wickham Terrace in its exterior is more reminiscent of an English parish church than are most of the Queensland churches, and in addition has the attraction of having a fine organ. The Baptist Tabernacle at the top of Edward Street has one of the finest sites occupied by religious edifices in city and has besides some claims to be considered architecturally well designed. The Jewish Synagogue in Mary Street, though small, has the usual characteristics of its type. Other churches adjacent to the city are, Trinity Church (Fortitude Valley) St. Mary's (Kangaroo Point), Ann Street Presbyterian Church, St. Pauls (Presbyterian) and St. Andrews (South Brisbane).

Hospitals and Charitable Institutions: The Brisbane General Hospital is a well managed and well arranged institution on the Bowen Bridge Road, reached by tram from the City (fare 3 d.). As necessary in a warm climate, the wards are a good distance apart and exceptionally well ventilated. The buildings cover a large extent of rising ground, the summit of which is occupied by the Lamington Home for the nurses of the Institution, who are comfortably housed there. A feature of the Brisbane Hospital is the success which has attended the adoption of the cold bath treatment for typhoid fever, the appliances for which treatment are most complete.

The Hospital for sick children is located near the General Hospital on the Herston Road, which leads off the Bowen Bridge Road, at the gates of the latter Institution.

The Queensland Blind, Deaf and Dumb Institution in Cornwall Street, South Brisbane (tram or train to Boggo Junction, fare 3 d.), is a very worthy charity, and the methods employed at the school in teaching the various industrial occupations usually imparted to the blind are very interesting. Visitors are admitted at any time. In connection with the Institution there are two separate schools for the education of the deaf and blind.

The Queensland Ambulance Transport Brigade Hospital (head centre 26 Wharf Street) is well equipped and well

manned for rendering first aid to the injured and other work for which the Brigade is specially suited.

Recently the Diamantina Hospital for Incurables has been opened, though its operations are not so far extended enough to be called complete. It is situated on high ground on the outskirts of South Brisbane and may be reached by tram (fare 3 d.).

The aged and indigent poor of the State are cared for at Dunwich on Stradbroke Island, in Moreton Bay. The settlement is healthily situated and the inmates well looked after. A Government steamer carries stores etc. down twice a week, returning to Brisbane the same day, and permission to visit the Asylum on those occasions may be obtained by applying to the Home Secretary's Department.

In connection with the Brisbane Hospital, a Convalescent Home has been established at Sandgate.

Fire Brigade. The head station of the Brisbane Fire Brigade is centrally located at the corner of Edward and Ann Streets, nearly opposite the Central Railway Station. The station is equipped with 3 steam fire engines, an escape ladder, 2 horse reels and 5 horses and the other customary appliances, together with an efficient staff. Auxiliary fire stations have been established in several of the suburbs with direct telephonic communication with head quarters. Fire alarms and signal calls are also erected and maintained in various parts of the city.

Press. There is only one morning daily in Brisbane — "The Brisbane Courier", published by the Brisbane Newspaper Company which also issues the "Evening Observer" and the "Queenslander", an illustrated weekly. The "Telegraph" is the only other evening paper published and from the same office comes "The Week". There are several other weekly papers published such as "Figaro" and "Flashes" both society publications, while there are two Sunday papers. The "Sports Observer", published on Saturday evenings contains a record of the sporting events local and interstate decided on that day. All the daily papers are published at 1 d., the weeklies at 3 d. and 6 d.

PLACES OF INTEREST AND AMUSEMENT.

Theatres. His Majesty's Theatre, the principal theatre of Brisbane, is very centrally situated, being located in Queen Street close to its intersection with Edward Street. The Theatre is very roomy and takes rank with the best in Australia. It is usually open and occupied by one or other

of the high class theatrical combinations touring Australia. In Elizabeth Street is the Theatre Royal, a small playhouse devoted almost entirely to vaudeville. Concerts are held at the Centennial Hall (Adelaide Street), the Norman Hall and the Exhibition Hall, the latter being in great request for orchestral and choral work in which the great organ can be used to advantage.

Art Gallery. The Queensland National Art Gallery at present in the Town Hall Building, Queen Street, cannot be said to be interesting, and though it has been in existence for some years now, little progress has been made. The trustees of the Art Gallery are enthusiasts, but are working under the disadvantage of an insufficiency of funds. Private citizens have come to the rescue and many of the pictures on the walls are on loan. There is a Queensland Art Society of which anyone may become an associate by paying a subscription of one guinea per annum.

Museums. The Queensland Museum, which is housed in the Exhibition Buildings at Bowen Park (tram 3 d.), has a collection which, though it cannot compare with the Australian Museum in Sydney, is nevertheless full of interest, including as it does, a comprehensive selection of Queensland natural history and other specimens. The Museum is open from 10 a. m. to 5 p. m., Sunday 2 to 5. p. m. Attached to the Department of Agriculture is a complete collection of samples of Queensland timbers with facts concerning their suitability for different classes of work and also other exhibits bearing particular reference to agricultural and kindred pursuits.

Public Library. The Public Library of Queensland is situated in William Street, overlooking the South Brisbane reach of the river. It has only recently been opened and contains a very compact collection of books on all classes of subjects, in addition to a well equipped reading room. The Museum has in connection with it a scientific library which is available for the use of students. The School of Arts, a subscription library in Ann Street, has a library of about 30,000 volumes and a good reading room which is open from 8 a. m. to 10 p. m. and also on Sundays.

Clubs, Societies, etc. The Queensland Club, corner Alice and George Street. The Johnsonian, in Adelaide Street. Visitors to the State, being eligible, are admitted as honorary members.

The musical societies are the Brisbane Liedertafel and the Brisbane Musical Union, both choral and orchestral societies, giving four concerts annually.

The Royal Geographical Society of Australasia is represented by a strong branch in Queensland, its rooms being situated in the public library building in William Street. The Royal Society of Queensland has rooms in the Technical College where monthly meetings are held.

There are six branches of the Australian Natives Association in Brisbane and its environs, besides social and recreation clubs affiliated with the Association. Its registered office is at the Adelaide Chambers Brisbane.

Parks, Gardens, etc. The Botanic Gardens and Queen's Park are located in the heart of the city about five minutes' walk from Queen Street, and a tram (fare 1 d.) runs thence to the gates. The grounds are tastefully laid out and the chief feature of the Gardens is the large number of tropical plants which are all labelled with their botanical and popular names, and particulars are added regarding their habitat, etc. In the Queen's Park, which is really part and parcel of the Botanic Gardens, a recreation ground has been formed. Beyond the gardens is the Government Domain, forming the point of the peninsula on which North Brisbane stands. The hot houses and fernery at the further end of the Garden are both rich in plants of a tropical climate and are well worth a visit.

On the Bowen Bridge Road, opposite the General Hospital, are the Acclimatisation Society's Gardens which may be reached by tram (fare 3 d.). These, though small, have been exceptionally well arranged and the best use possible made of the space at the disposal of the Society, which pays special attention to experimental horticulture and to the improvement of existing varieties.

Beyond these two parks there is nothing to interest the visitor to Brisbane in the shape of horticultural collections. There are several reserves in and about the city, but though planted with trees they cannot be said to have any attractions, and may be considered mainly in the light of raw material which the authorities may turn to good account later on. Such recreation reserves, for they are little more, are the Victoria Park, Albert Park, and Musgrave Park.

EXCURSIONS.

There are many seaside resorts within easy distance of Brisbane and accessible for a day's outing. Trains run frequently to Sandgate on the shores of Moreton Bay (fare 2/3 return), where facilities are afforded for picnicing, bathing, etc. A steamer runs three or four times a week to Humpybong (fare 2/6) and excursionists

have an excellent view of the river and bay during the journey. The steamer makes the return trip in the one day and allows passengers a run ashore. On the south side of the mouth of the river are Wynnum, Manley, Wellington Point and Cleveland, to all of which trains run at moderate fares. Fifty miles from Brisbane is Southport, a little seaside town with good shooting and fishing in the vicinity.

One Tree Hill, from which an excellent panorama of the city and suburbs is obtainable, is reached by conveyance from the city. A good road all the way renders walking possible and the view from the summit compensates for the trouble taken in getting there.

Euoggera Reservoir is another favourite drive of about eight or ten miles. Application to the Board of waterworks will secure permission to use the boats moored in the lake, and the sheet of water may be traversed in several directions.

For an afternoon's outing there is nothing better than a trip over the lines of the Brisbane Tramway Company. The through journey on each of the routes from terminus to terminus costs 6 d., and as these routes traverse the suburbs in all directions a very good idea of the environs of the city can be obtained in this manner. The cars are comfortable and are usually of the open variety.

For those who wish to go further afield and are willing to spend a few days in visiting the southern portions of the State, a plan to be recommended is that embracing a trip to the Darling Downs. The Government issue excursion tickets at very low rates to Toowoomba at frequent intervals, available for return by the ordinary train. Toowoomba (distance 101 miles) is within a three hours' journey of the metropolis, and the railway line passes through closely settled country for almost the whole distance. From Toowoomba the journey may be extended to Killarney, through an extensive wheat growing area. At Killarney, which is close to the southern borders of the State, some picturesque scenery is to be found.

IPSWICH.

Ipswich, which had one time aspirations towards being the capital of Queensland, is situated on the river Bremer, a tributary of the Brisbane, at the head of navigation, and about $23\frac{1}{2}$ miles by rail from the metropolis. The river flows through the town, most of which is situated on the southern or right bank. Several trains run daily between Brisbane and Ipswich, the journey occupying between forty minutes and one hour. The town is the centre of a prosperous mining, manufacturing and agricultural district.

Excellent coal is obtained in the vicinity, and the Ipswich carboniferous area at present is the most largely worked in the whole State. The coal is close to the surface, is easily extracted and is of good quality for house, steaming and other purposes. The principal collieries are the Watertown, Swanbank, Tivoli, Aberdare, Borehole and New Chum, while pits are also in operation at Walloon and Purga. The area of the municipality is 2,560 acres, and the length of roads and streets within the boundaries is 41½ miles. The town is lighted by gas and reticulated with an efficient water service, the supply being drawn from the river Bremer through a line of pipes some five miles in length. The main thoroughfare is Brisbane Street, in which are situated most of the public buildings and business premises. Among the former may be mentioned the Town Hall, and the Post and Telegraph Office, a fine modern structure with a massive clock tower, the Lands Office, the School of Arts (with a library of some 7,000 volumes), the Railway Station and several public halls, among them being those belonging to various friendly societies and the Olympic Assembly Rooms. Ipswich is well supplied with churches. Among them are St. Paul's, St. Thomas' (Anglican), St. Mary's (Roman Catholic), St. Stephens' (Presbyterian), four Methodist, four Congregational, Luthern, Baptist and other denominations. The manufacturing industry is represented by woollen mills, a butter factory, sawmills and foundries. The railway workshops at Ipswich have been considerably extended of recent years and now contain the most up-to-date machinery and appliances procurable. The workshops are in North Ipswich and cover some 15 acres of ground. The chief hotels in Ipswich are the North Star, the Royal, North Australian and Commercial. The "Queensland Times" with a steady circulation is published as a tri-weekly, and the metropolitan newspapers reach the town very shortly after publication. According to the latest census (31st December 1903) the population of the town and suburbs totalled 8,637.

The districts round Ipswich are closely settled with farms (dairy and otherwise) and market gardens, the owners of which mostly use Ipswich as their centre, so that the town is a busy and prosperous one. Some enjoyable drives can be obtained on the outskirts of the town.

TOOWOOMBA.

Toowoomba, which is rapidly becoming recognised not only as a health resort for the people of the coast, but also as one of the most important inland towns in Queensland,

is situated on the summit of the dividing range on the eastern edge of the Darling Downs, for which rich tract of agricultural and pastoral country it forms the entrepot. It is 1,921 feet above sea level and about 101 miles from Brisbane by rail, the journey occupying about five hours. The trip up the range offers the traveller a succession of fine landscapes as the gradients are negotiated. The area of the municipality is 3,840 acres and altogether there are nearly seventy miles of roads and streets. The principal business street is Ruthven Street. Among the public buildings may be mentioned the Town Hall and Municipal Chambers, in connection with which a commodious theatre was recently opened, a Court House, Railway Station, several excellent educational institutions, a hospital and an asylum for the insane, the latter being an extensive and well arranged building. The following Banks have branches doing business in the town — Bank of Australasia, Commercial Banking Company of Sydney, Australian Joint Stock, Union Bank of Australia, Bank of New South Wales, Royal Bank of Queensland and the Queensland National Bank. Waterworks are situated some little distance out of the town, the supply being derived from wells. There are several fine churches, including St. James' (Church of England), and St. Patrick's (Roman Catholic). There is also a Jewish Synagogue. In the town are to be found flour mills, sawmills, foundries, tanneries, breweries, malthouses, factories and other industrial concerns. "The Darling Downs Gazette" and the "Toowoomba Chronicle" are published tri-weekly. The population at the end of 1903 numbered 10,600 persons. Toowoomba is regarded as one of the most healthy and charming localities in Southern Queensland, the climate being mild and salubrious; and in the summer months it is a great resort for people from all parts of the State. It may perhaps be mentioned that around Toowoomba there are a very considerable number of Germans carrying on farming and orcharding. All of them have vineyards of greater or less extent, and a large quantity of wine is made. There are many handsome private residences with well laid out gardens and grounds in or near the town. The accommodation in the town is good, there being numerous hotels, the most popular of which are Royal, Imperial, Queen's and Globe, in addition to which numerous boarding houses, built on the very edge of the range, cater for the large influx of visitors who make a shorter or longer stay in the town during the summer months. The Government have adopted a system of week-end excursions to Toowoomba which are largely patronised and particulars of these are duly advertised.

ROCKHAMPTON.

Rockhampton, the principal city of Central Queensland, is situated on the River Fitzroy, 470 miles (by sea) north of Brisbane and 22 miles from the mouth of the river. The Fitzroy is a shallow stream navigable only by the smaller coastal traders, the larger boats and all oversea vessels anchoring in Keppel Bay under Sea Hills. Passengers are transferred to the town by tender and the cargo is lightered. Since the last link of the Gladstone Rockhampton Railway has been completed, it has also become accessible from Brisbane by rail. At Port Alma, at the mouth of the river, wharves have been built, and also at Broadmount. Among the hotels may be mentioned the Leichhardt, Criterion, Commercial and Imperial. The trade of Rockhampton is considerable, and in 1901 the imports were £419,736 and the exports £1,445,663. The area of the municipality is $23\frac{1}{10}$ square miles and there are about 80 miles of roads and streets within the boundaries. The estimated capital value of property for Rockhampton and North Rockhampton together amounts to a larger sum than any other town outside the metropolis. Rockhampton is a cathedral city, for both the Church of England and Roman Catholic denominations, and the places of worship generally are of a high architectural order. Among the other public buildings may be mentioned the Supreme Court, Lands Office, Custom House, Hospital, which is healthily situated and capable of accommodating 70 patients, the Post and Telegraph Office, a two-storey building of brick and stone with clock tower. The places of worship include St. Paul's (Church of England), St. Joseph's (Roman Catholic), two Presbyterian, Wesleyan, Baptist, three Primitive Methodist, Salvation Army Barracks and Friends Meeting House. The Union Australian Joint Stock, Australasia, Queensland National, Royal, North Queensland and New South Wales Banks have branches in the town as also have the many insurance and other financial companies. There is a modern and well equipped meat works at Lope's Creek from which a considerable amount of frozen and preserved meat is exported over the Rockhampton wharves. The Rockhampton water supply comes from the Crescent Lagoon, two miles away, whence it is pumped to the summit of the Athelstane Range into two artificial reservoirs. Rockhampton is the starting point of the central railway running out to Longreach through very productive pastoral country for the most part. Rail communication is also maintained with Mount Morgan, 28 miles away, the railway being taken over the steep gradients of

THE BARRON FALLS' GULLY
QUEENSLAND.

Razorback on the rack principle. A short line also runs to Emu Park, the watering place of the town. Both these places are worth a visit, while nearer to town are the Botanic Gardens on the banks of the Fitzroy River beyond the Athelstane Range. About 15 miles N. W. of Rockhampton near Mount Etna are spacious caves known as Olsens and Johnsens. A fine bridge, 1,100 feet long consisting of five steel spans connects Rockhampton and North Rockhampton. There are two daily papers the "Bulletin" and the "Record", besides several weekly publications. The population of Rockhampton according to the latest available figures (1903) is 18,476 persons.

TOWNSVILLE.

Townsville, which may be considered one of the most flourishing towns of Australia, north of the latitude of Brisbane, is situated on the shores of Cleveland Bay, 870 miles to the northward of the metropolis. The bay itself is very shoaly, though great efforts have recently been made in the direction of extending a substantial breakwater and deepening the berths alongside by dredging. All the coastal craft and most of the oversea vessels can now berth at the breakwater, where between two and three thousand feet of wharf frontage is available. The stone breakwaters enclose a fine harbour, continually being deepened by dredging. The eastern breakwater, 4,088 feet long with a concrete parapet 4 feet high, for a considerable portion of its length has a railway line running along it in direct communication with the Great Northern system. The western breakwater is very nearly completed and other extensive harbour improvements are being carried out. Passengers on landing are met by cabs which convey them to one of the several good hotels, among which may be mentioned, Queen's Hotel, one of the best appointed houses north of Brisbane, and Buchanan's.

The largest steamers lie out in the roadstead, which is protected to the east by Magnetic Island rising to the height of 1,600 feet. Townsville, as the port of the rich pastoral country round Winton, Hughenden, Richmond and other centres, has an extensive oversea trade not alone coastal but also to Great Britain, the Continent of Europe, China, Japan, and the East. The imports for 1901 were valued at £ 780,276 and the exports at £ 2,109,975, the latter being mostly the products of pastoral pursuits although the agricultural output from the prolific soil of the lower Burdekin contributed materially to this total. The estimated area of the municipality is 2,080 acres with 75 miles of

roads and streets. The water supply is one of the best in the State. It is derived from two wells sunk about three or four miles from the town, which are believed to have tapped a subterranean stream. The water is pumped to a reservoir on Castle Hill whence it is reticulated by gravitation to all parts of the town. The town, new as it is, already bears many evidences of solidity, but unfortunately the location was not well chosen. It is built partly on the banks of Ross Creek and partly on the slopes of Castle Hill, which rises steeply to a height of 1,000 feet on the north side of the town, and effectively checks any expansion in that direction. On the beach, which is a fine stretch of sand, many hotels, boarding houses and private residences have been built, the coolness of the situation being naturally much appreciated. Melton Hill is a short distance from the centre of the town and has also been effectively utilised for residential purposes. Townsville is the headquarters of the Northern Supreme Court, which is located in a handsome two storey building on the slopes of Melton Hill. The hospital consisting of three two storey brick buildings has accommodation for over 100 patients. Other public buildings include a large and commodious Post and Telegraph Office, a Custom House, Lands Office, Reception house for the Insane, a Quarantine station on Magnetic Island, Military Barracks and fortifications on Magnetic Island and Kissing Point. At Stewarts Creek ($4\frac{1}{2}$ miles from Townsville) is a penal establishment said to be one of the best buildings of its kind in Queensland. The New South Wales, Queensland, National, Union, Australasia, Australian Joint Stock, Commercial and London Banks have all branches here and the Bank of North Queensland its head office. Townsville is the head of the episcopal see of North Queensland, and the cathedral is one of the most imposing buildings in the city. The Roman Catholic Cathedral when completed will also be a very handsome edifice, other places of worship are St. Peters, St. Johns (Church of England), St. Josephs, St. Marys (Roman Catholic), Presbyterian and Congregational churches and two Wesleyan chapels. Townsville, although in the main a shipping port has several factories in operation, while the Queensland Meat Export and Agency Company's works on the banks of Ross Creek employ a large number of hands when in operation. The North Queensland Company's works on Alligator Creek have also extensive premises. There are two daily newspapers, the "Bulletin", morning, and the "Star", evening. The population of the town according to the 1903 census is 10,960.

CHARTERS TOWERS.

Charters Towers, perhaps the most interesting inland town in Queensland and the headquarters of the richest gold field in the State if not in Australia, is distant 82 miles from Townsville with which city it is connected by rail, three through trains running daily. The town is built on the northern spurs of the Towers Mountain, at an elevation of about 1,000 feet, a circumstance which renders the climate, though hot in summer, rather more pleasant than that of the majority of interior settlements. The area of the municipality is 640 acres and there are 17 miles of streets in the boundaries, though the suburban thoroughfares greatly increase this length. There are several good hotels on the field such as the Exchange, Australian, Crown, Royal, Imperial and others, and the public buildings are numerous and well proportioned. But the chief interest of course to any visitor to Charters Towers lies in the gold mines, a brief reference to which will be found under the mining section appearing some pages previous. The principal mines are all fitted with up-to-date machinery and appliances, and the managements are usually ready to afford facilities for the procuring of information. "The Towers", as the town is usually called, like all mining localities is full of life, and the social and lighter side of the days existence is by no means forgotten by the prosperous community which draws its living either directly or indirectly from the field. The population of the town was, when last numbered 5,500, a very large proportion of this total being connected in some way or another with mining pursuits.

TASMANIA.

Of all the States of the Australian Commonwealth, Tasmania possesses by far the most numerous attractions as a tourist resort. In this respect it vies with New Zealand, but while a visit to the latter colony involves a sea trip of nearly ten days (going and returning), Tasmania can be reached from Sydney in three, and from Melbourne in one day, and a three weeks' holiday suffices for a comprehensive survey of the island. Tasmania is in very many ways a direct contrast to Australia, and the conditions of climate, scenery and natural features generally are quite different from those obtaining on the mainland. As a natural consequence the island has already become a favourite health resort for Australians who do not care to face the hot and enervating summer climate of the east coast, and from Townsville down to Melbourne, each year sees an increasing contingent of holiday makers going over for a few weeks' rest and recreation. Of recent years travellers from overseas have also shown a more pronounced tendency to include Tasmania in their itinerary, so that the island is rapidly assuming all the customary characteristics of a holiday resort, and a considerable portion of its inhabitants, have learnt to depend either directly or indirectly on the enhanced value of their commodities and their accommodation which the rush of summer visitors brings.

And Tasmania is worthy of the high estimation in which it is held by Australians in particular and the tourists in general. Its chief towns Hobart and Launceston are connected by rail, and so situated that the most popular places of interest can be reached easily from one or the other of them, while the scenic beauties are manifold and varied, the high and broken character of the island offering a never ending panorama of hill and dale, gorge and valley, plain and mountain. Tasmania has, as far as scenery is concerned, been compared to Scotland. A recent writer on the island says: "In appearance the State of Tasmania is more English than the rest of the group." This remark applies to its natural as well as its social features.

The surface of the island is remarkably uneven, being a succession of hills and valleys of greater or less height and depth, and though it cannot compare in grandeur with parts of New Zealand, it presents a great variety of scenery.

Densely wooded mountains, and glassy lakes vary with green valleys watered by never failing rivers; extensive sheep lands and the wide expanse of agricultural country studded with homesteads, are made pleasant to the English eye by the presence of highly cultivated gardens and orchards, fenced by hedges such as adorn the landscapes of Britain. On the west and south west coast there is country as wild as could be wished; lofty cliffs towering sheer from the water's edge, rugged mountains clothed in almost impenetrable forests and rocky depths down which the roaring mountain torrents race to the sea. In the eastern half the land is more level, though broken by high ground in all directions, and it is there that the agricultural community, orchardists and the famous stud sheep breeders have established themselves. There is no aspect of Tasmania that may be termed a disadvantage, and from the time the tourist enters Hobart Harbour, and views the town nestled at the foot of Mount Wellington, he may look forward to a trip of almost unalloyed pleasure, while if he be a sportsman he may rely upon work in plenty for his rod and gun in the interior, and especially around the lakes of the central plateau.

In other respects also Tasmania possesses many points of attraction, and the student of social and political economies no less than the lover of nature will find it full of interest. The history of the State, commencing with all the horrors of the convict system, and passing on through the exciting times of the bushranging era, the war against the natives, and the first stirring years of responsible Government, abounds in incidents of a more varied character than are to be found in the records of the mainland States.

AREA AND BOUNDARIES.

Tasmania, "the Island State" as it has been named, is washed on three sides by the South Pacific Ocean, while to the north, the 150 miles of Bass Straits divide it from the mainland. Its area is 26,215 square miles or 16,778,000 acres, including the adjacent islands, and the area covered by the many large lakes which are situated on the central plateau. Excluding these islands and lakes the area may be estimated at 24,330 square miles or 15,571,500 acres. The island is 170 miles in length, or, taking the diagonal from the north west to the south east, 210 miles, and its greatest breadth, which is towards the north, is 200 miles. It is situated between 40° 40' and 43° 38' south latitude and 140° 30' and 148° 30' east longitude.

PHYSICAL FEATURES.

In the main, Tasmania is a high and broken land with mountainous or hilly country in all directions, the centre being a lofty well watered plateau. There are two distinct mountain chains, one running down the east side of the island at an average altitude of 3,700 feet at a distance of about 40 miles from the sea, though in some parts it approaches much closer than that. Its general direction is north and south parallel with the east coast, and its highest elevations are Ben Lomond 5,010 feet, Mount Victoria 3,964 feet and Mount Arthur 3,895 feet. To the west of this range is the central table land and the western chain of mountains which is still more diversified by peaks and ranges in all directions. In this system is Cradle Mountain (5,069 feet) the highest point in Tasmania. Other lofty peaks and ranges are Mount Huger 4,700 feet, Eldon Range 4,789 feet, Mount Field 4,721 feet, Frenchman's Cap 4,756 feet and Black Buff 4,381 feet.

The fresh water lakes of the central plateau are numerous, some of them being of large size and all at a considerable height above sea level. Great Lake, the largest, covers an area of 28,000 acres, and is situated at an altitude of 3,822 feet. Other lakes that may be mentioned are Lake Sorrell 12,300 acres, Lake St. Clair 9,400 acres, Lake Echo 8,500 acres and Arthur's Lake 8,000 acres.

As regards rivers Tasmania is well supplied with numerous streams, chief of which are the Derwent, upon the banks of which stands Hobart, the Huon, which flows through a very fertile tract of country, the Gordon, the estuary of which forms Macquarie Harbour, the Corima, Arthur, Quamby, and the North and South Esk whose confluence forms the Tamar, a stream of considerable volume on which Launceston, the second town of the State, is situated.

The coast, though bold and rocky especially on the west side, is indented with several fine harbours, and good anchorage or shelter can be found all round the island. To the north are Port Frederick, the harbour of Devonport, Port Dalrymple which is the seaward name for the Tamar, Anderson Bay and Ringarooma Bay. The East coast is studded with exceptionally fine harbours, among which may be noted Port Arthur, Storm Bay (including Norfolk Bay and Frederick Henry Bay) and D'Entre-Casteaux Channel. The West coast also possesses fine ports in Macquarie Harbour and Port Davey.

Within the boundaries of Tasmania are many islands of considerable area. In Bass Straits are the Furneaux

I

C

1/2

1/4

group, the residence of a small, chiefly half-caste community of under a thousand souls, who are engaged in seal fishing and mutton bird catching, the latter fowl resorting there in millions at certain seasons of the year; King Island upon which an agricultural settlement has been successfully established and which has frequent communication with the mainland, Robins Island, and Hunter Island. Other islands are Swan, Schouten, Maria and Bruni.

The principal promontories are, starting from the north west corner: Cape Grim, Circular Head, Rocky Cape, Portland Cape, Cape Naturalist, St. Helens, Long Point, Capes Bougainville, Pillar, Raoul, Tasman, Bruni Heads, Rocky Point, Point Hibbs, Cape Sorell and West Point.

CLIMATE AND RAINFALL.

Surrounded as it is on all sides by the sea, Tasmania enjoys a far more equable climate than falls to the lot of any of the other States in the Australian Commonwealth. In fact the mildness of its climate is remarkable, considering its low latitude, and there is no unpleasantness to be feared from the extremes of heat and cold which a more continental location might occasion. Snow is very seldom seen on the coast even so far south as Hobart, though Mount Wellington, which dominates that town, often has its upper slopes covered. While the epithet genial can be with justice applied to the Tasmanian climate, it is at the same time breezy and invigorating, its health-giving properties being most marked. The atmosphere is pure and bracing, and there is an almost total absence of zymotic disease among the inhabitants. The year is divided into four well defined seasons. The Summer is generally considered to last from the beginning of December to the end of February, during which months the temperature ranges from 78° to 96° , though the latter figure is unfrequently reached. The sun's heat is as a rule tempered by a breeze which blows either from the uplands or the sea, and is in consequence always comparatively cool, while the hot winds of the mainland, although they occasionally reach the southern districts, are so cooled down in the process of crossing Bass Straits, that much of their fierceness is lost. Thunderstorms do not often occur and are never very violent.

The Autumn months March, April and May are usually the most pleasant periods of the year, the mean temperature approximating to 55° , which may also be reckoned the annual mean. In winter, the range is from 20° upwards; the mean

temperature being 47°, except on the west and south west coast where it is sometimes very much lower.

The rainfall is not abnormal and for the most part does not partake of the tropical character so often experienced on the mainland. For typical stations the rainfall for the twelve months ending September 30th 1902, may be given as follows:—Hobart (east coast) 19.41 inches on 144 days, Launceston (north) 22.46 inches on 116 days, Waratah and Corunna (west) 73.3 inches for 233 and 209 days respectively, while the wettest place on the island for the period continued was Mount Lyell where no less than 114.53 inches of rain fall on 233 days of the year.

POPULATION AND VITAL STATISTICS.

According to the latest available figures (31st December 1903) the population of Tasmania was 179,487, an increase on the figures of the preceeding year of 2,415, which increase it may be mentioned was below the natural increment of births over deaths. The census totals taken on March 31st 1901 set down the population as amounting to 172,475 persons (89,624 males and 82,651 females) which gave a distribution of 679 to the square mile, representing nothing like the normal carrying capacity of the land. Much of the western and south western country is however as yet very difficult of access, and in consequence sparsely populated, the greater portion of the community residing on the eastern half of the island.

The birth places of the people as disclosed by the census tables was as follows:—

Tasmania	136,472
New South Wales	2,075
Victoria	7,949
Queensland	288
South Australia	887
West Australia	96
Total Australian States...	147,767
New Zealand	1,193
United Kingdom	19,815
Other British Colonies	607
Germany	773
U. S. of America	237
Chinese	484
Other nationalities	1,599
Total...	172,475

The aggregation of population within the municipal area is not so marked in Tasmania as in Victoria or New South Wales, though it may perhaps be admitted that in proportion to the total, the population of Hobart and Launceston are too great. But the agrarian element is decidedly in evidence, and the small country towns acting as centres of agricultural, mining or fruit growing districts are in comparison more numerous.

As has already been said, Tasmania, as regards its vital statistics, shows up very favorably. There is no question that the climate is a healthy one, and in the death certificates "old age" as a cause of death is of more than usually frequent occurrence. Of the deaths in 1903 the causes were set down as follows:—

Specific febrile or zymotic diseases	168
Parasitic	4
Dietetic	4
Constitutional	278
Developmental	329
Local	278
Violence	121
Undefined	121

The smallness of the total in the case of the specific febrile or zymotic diseases bears out the contention that epidemics rarely visit the island, although mention should be made of the visitation of smallpox to Launceston which caused a serious amount of sickness and death in the town during 1903.

HISTORY.

Tasmania, or Van Diemens land as it was then called, was founded in 1803 as a subsidiary penal settlement to Sydney, whither all the most refractory of the criminals were sent. Probably no other land suffered under such a start in life. The men who composed its first settlers were either hard, stern martinets living by and for "the system", with all their finer feelings crushed down by the necessity for preserving a rigid discipline among the degraded wretches, whose catalogue of crimes was such that they had themselves abandoned all hope of every redeeming themselves. Tasmania paid dearly for this influx of criminals in later years, for those who, though rarely, escaped from the vigilance of their guards turned bushrangers, and committed unheard of atrocities on the inoffensive natives, driving them to retaliation in which they visited the indignities and cruelties upon

the innocent and guilty alike. The whole country-side was in a state of siege, fearing both the raids of the bushrangers and the attacks of the natives. This reign of terror lasted from 1810 to 1830 when the rule of the strong-willed Governor Arthur crushed the bushrangers, and one Robinson who tried kindness with the natives when all methods of shooting them into ultimate subjection had failed, persuaded the hunted remnant of one of the most interesting people in the world to come into a reservation. Thence-forward Tasmania progressed steadily but surely. The whaling and sealing industries, which had been the first productive factors, gave place to the more settled pursuits of grazing and agriculture. In 1882, the island which had hitherto been a dependency of New South Wales, was proclaimed a separate colony and given an Executive and a Legislative Council. As settlement spread and the free element in the community increased, the agitation for the abolition of convict transportation began as it did in the mainland States, and after a long and bitter struggle, protracted by the opposition of those to whose interest it was to retain convict labor, the withdrawal and disestablishment of the penal settlements was effected in 1853. In the same decade the discovery of gold in Victoria and New South Wales created such an exodus that the islands threatened to become depopulated, so great was the rush to the scene of the excitement. But when the fever had abated Tasmanians realised that it was almost as profitable and much more sure to take in hand the task of feeding the diggers, and with the export of foodstuff, especially meat and vegetables, to Victoria, the imports expanded in corresponding ratio and an era of prosperity set in. Since the sixties Tasmania has progressed along the lines that make for solid prosperity. There have been reverses serious in some ways but the State has successfully weathered the storm and to-day occupies a position not unimportant in the community of the Australian Commonwealth.

CONSTITUTION.

The constitution of Tasmania differs in no material degree from that in force in the other autonomous States of the Australian group. There is a Governor appointed by the Crown, who represents Vice-regal authority in the island, and with the advice of an Executive Council, administers the government of the State. The legislature is bicameral, consisting of the Legislative Council and a

HARTZ MOUNTAINS, TASMANIA.

House of Assembly. The Upper House is composed of eighteen members, and is elective, thirteen constituencies returning one member each, while Hobart has three and Launceston two representatives. Members must be over thirty years of age, and either natural born or naturalised subjects of the British Empire. Electors must be over twenty-one and also subjects of the Empire, and must possess either a property or an educational qualification. The former qualification which is a comparatively small one, is acknowledged by 96 per cent of the electors, so that for all practical purposes it may be considered the only one. The tenure of a seat in the Council is six years and the usual disqualifications apply. Admission to the gallery is obtainable by means of a pass from one of the members. The House of Assembly comprises 35 members returned from thirty electorates, the qualifications for members being very similar to that obtaining in the Council. The electors vote on a manhood suffrage, the only requisite being a twelve months residence in Tasmania prior the voting. Female Franchise has not yet been introduced into Tasmania. The reimbursement for members of both Houses is £100 per annum. The tenure of a seat in the Assembly is 3 years, that being the duration of Parliament. Admission to the gallery during the session is obtained by a pass from one of the members. The Cabinet consists of four salaried ministers who at present hold the following portfolios:—Premier and Attorney General, Treasurer, Chief Secretary and Minister for Lands and Works.

POSTAL AND TELEGRAPHIC.

As far as postal arrangements are concerned, Tasmania differs in no degree from the other States under the jurisdiction of the Federal Postmaster General. Town rate 1 d., country and inter-state 2 d., Great Britain and foreign 2½ d. for every half oz. are the charges on letters. In telegraphic communication however the necessity of having a cable across Bass Straits adds to the interstate charges. A duplicate cable under the control of the Eastern Extension Company is laid across the Straits, and the interstate charges are for telegrams: 3 words 1/1½ and every additional word ½ d., to New Zealand 5 d. per word.

EDUCATION.

The State system of primary education in Tasmania is, as usual in the Australian Commonwealth, secular, compulsory and practically free, though small fees ranging from sixpence

to ninepence per week are charged against those parents judged capable of paying it. The school age is fixed at from 7 to 13, but enforcement of the compulsory clauses of the Act has not so far been as stringent as could have been wished. Special religious lessons are given to the children outside school hours and the teachers instruct them in religious history. Four Primary Instruction Boards of Advice are appointed in the different districts, with the object of looking after the requirements of the localities they represent in educational matters. Secondary education is in the hands of grammar and other private schools both denominational and undenominational in character, none of them receiving any aid from the State. There are also technical schools at Hobart and Launceston, and schools for Mines at Zeehan and Beaconsfield, all of which are subsidised — though somewhat sparingly — by the Government. A University of Tasmania was established in 1890, at first purely as an examining body, but later a teaching staff was appointed, and instruction is now given in Arts, Science and Law subjects. The University has its headquarters at Hobart, but lectures in connection with it are given during weekly visits to Launceston. Local examinations are also held, and at the "Senior", two University scholarships are granted.

The general educational standard of Tasmania compares very favorably with that of the other Australian colonies, and, as is well known, that standard is a high one. Public libraries and a School of Arts in the country towns serve as centres for knowledge and as such are subsidised by the Government.

At latest dates there were 346 Primary State Schools in Tasmania with 603 teachers and an average enrolment of 18,596 children. The private schools numbered 177 with 302 teachers and an average attendance of 6,800. The net cost of primary instruction to the State was £52,140, and the fess received totalled over £12,000.

RELIGION.

All religions are equal in Tasmania in the sense that none are preferred to the others in the matter of State aid, such aid having been abolished some years ago, following the example set by the other provinces of Australia. Numerally the Church of England is the strongest sect in the State, the Roman Catholics coming second, and the Wesleyan and other Methodists third. The Anglican Church

of Tasmania is under one bishopric, and the controlling power of the Roman Catholic Church is reposed in the Archdiocese of Hobart. The total number of adherents of the various denominations with the percentage to the total population, according to the figures of the last census were as follows:—

	NUMBERS	PERCENTAGE
Church of England	86,436	49.6
Roman Catholic.....	30,324	17.9
Presbyterian	11,523	6.8
Wesleyan Methodists	24,961	14.8
Independent Congregationalists	5,544	3.3
Baptists	4,716	2.8
Other Christian sects.....	4,106	4.8
Non Christian.....	1,485	
Other religions	3,380	

According to the latest available figures the Church of England has 49 Cures, 68 Clergy and 278 Churches and places for public worship. There are 63 churches and 38 stations under the Roman Catholics, the secular priests numbering 25. The Methodists have 36 ministers, 152 churches, and 3,608 members, while the Presbyterians support 24 ministers, 60 churches and 1,500 members. The Congregationalists have 17 churches and 30 ministers, and the Baptists 12 churches, and 745 members.

FINANCE.

The ordinary revenue and expenditure accounts of Tasmania disclose the same sources of income and outgoings that prevail in all the States of the Australian Commonwealth. The principal item is that which comes under the heading of customs and excise, or, more broadly, returns from the Commonwealth Government. There are also graduated income and land taxes and returns are also received from rents for land, the railways, and other reproductive public works. The financial year ends on the 31st of December, and for 1903 the revenue was £ 857,866 comprised as follows:— Returns from Commonwealth Government, £ 304,857; State Taxation, £ 150,092; Land Revenue, £ 72,585; Railways and Tramways, £ 248,024; other sources, £ 82,110. The expenditure amounted to £ 879,356, the chief heads being: Interest on the Public Debt, £ 340,095; Railways and Tramways, £ 166,351; Public Instruction, £ 70,073; All Other Services, £ 302,837. The deficit for the year was therefore £ 21,490.

The following four Banks do business in Tasmania:— The Commercial Bank of Tasmania, The National Bank of Tasmania, The Bank of Australasia, and the Union Bank of Australia. The two former having their head office within the State, and the others outside it. In addition there is the Government Savings Bank much patronised by small depositors.

COMMERCE AND SHIPPING.

The yearly exports of Tasmania always exceed the imports, a satisfactory sign in a comparatively young country. For the year 1901 the total imports amounted to £ 1,965,119, or £ 11.6.5 per head, and the total exports to £ 2,945,757, or £ 16.19.5 per head. In imports the principal figures were:— Textile fabrics £ 358,013; Sugar and Molasses £ 146,326; Hardware £ 126,432, Machinery (principally mining and agricultural) £ 134,714. The chief exports were Copper £ 876,632; Silver £ 325,335; Tin £ 216,186; Gold £ 204,164; Fruit, Jams etc. £ 330,939; Wool (9,019,474 lbs.) £ 280,347; Potatoes £ 183,934; Oats £ 63,919. The chief ports of the State are Hobart, Launceston and Burnie. During 1901, 816 vessels of a tonnage of 706,044 entered, and 820 vessels of 726,681 cleared, giving a total tonnage entered and cleared of 1,432,725, of which 918,758 tons was for interstate ports. Of the total tonnage Hobart took 870,733, Launceston 199,444 and Devonport 124,964 tons. A very considerable amount of interstate traffic both passenger and freight is carried on, and several lines of coastal steamers trade regularly to Hobart and Launceston, the other terminal ports being Melbourne and Sydney. Chiefly owing to the direct route between Melbourne and Hobart having come more into favor in recent years, the trade of Launceston has stagnated somewhat, but it is still a busy seaport town and a large amount of agricultural produce especially, passes over its wharves. The same may be said of Devonport.

MINING.

For many years Tasmania was thought to be destitute of all mineral wealth, and in the days of the gold fever in Australia, thousands of its inhabitants left to try their fortunes on the other side of the Straits, convinced that as far as mining development was concerned, it was useless to exploit Tasmania. Subsequent events proved them altogether wrong, and though certainly gold has not yet been

found in any great abundance, the State at the present time is the largest producer of both tin and copper in the Australian group. In 1872 the possibilities in this direction were revealed by the discovery of Mount Bischoff, a mine that has now become the greatest tin producer in the world. Since then Tasmania has taken a definite place in the ranks of the mineral producers and has added copper and gold to her output. The State is divided into five mineral districts, the North, South, North East, North West and West, each under a commissioner or registrar, and though the minerals mined for on the different districts vary, great activity is displayed, and several towns of no inconsiderable population depend upon mines or groups of mines for their existence. Gold is for the most part found in the northern and western divisions. Both alluvial and quartz mines are worked, deep levels being successfully worked in the latter variety. The principal gold field is at Beaconsfield, 26 miles south west of Launceston, and on it is the Tasmanian Mine, the largest gold producer in the State, more than 600,000 oz. having been taken out of it since its discovery. Lefroy is another important centre, while at Mathinna is to be found the deepest gold mine in the State, the New Golden Gate, obtaining payable returns at 1,600 feet. Dredging for gold has also been tried but so far has been found disappointing.

Silver is mined for principally on the west coast and in the north west, the chief mines being Zeehan-Montana, Mount Zeehan, Western, and Mount Magnet. The largest output, however, is from Mount Lyell where it is found in conjunction with copper, of which the output is greater than any mine in Australasia. Mount Lyell may perhaps be better described as a group of mines, the Company which originally opened it up, having since acquired a number of mines on a rich belt of copper pyritic ore, stretching from Mount Lyell to the Rocky and Savage Rivers. The output of ore from this group of mines averages 1,000 tons per day, and large reduction works are in operation at Queenstown. The Company has also, under parliamentary sanction, built railways for the more expeditious conduction of their works. (See also under "Excursions"). In tin, as has been said, Tasmania is the largest producer in Australasia. The fields are for the most part located in the North West district, and both alluvial and lode tin are obtained. Mount Bischoff, which is in the Waratah district, is worked as an open quarry, and since discovery to the 31st of December 1903 (roughly thirty years), during the last six months of which it yielded 636 tons of the metal, the mine paid £1,912,000 in dividends. (See also under "Excursions"). The metal,

which occurs usually in schist, slate and porphyry formations, is also mined at Blue Tier, Ben Lomond, the West Coast districts, and in some localities on the east coast. Extensive deposits of iron ore are known to exist on the Blythe River near Burnie, and it is probable that within a few years the iron works of the Commonwealth will be largely supplied from there. Coal seams are found in various parts of the State, and are being worked to advantage on the Mersey, Don, at Adventure Bay and Port Cygnet. Coal of good quality is also found in other parts of the State, but the production is as yet inadequate for local requirements. Fingal and Mount Nicholas coal from the north east coast bids fair to supersede the imported article. Among other metals and minerals found and mined in Tasmania may be mentioned bismuth, antimony, wolfram and asbestos.

The mineral production of Tasmania up to June 30th 1902, and the value thereof may be set out as follows:—

	PRODUCTION	VALUE
Gold.....	1,170,135 oz.	£ 4,499,215
Coal.....	691,865 tons	£ 594,917
Tin.....	71,116 "	£ 6,474,217
Silver ore....	232,040 "	£ 2,262,329
Blister Copper	42,191 "	£ 3,572,867
Copper.....	21,809 "	£ 276,003

AGRICULTURE.

A large area of Tasmania is admirably adapted for agricultural pursuits and the farming section forms a very important part of the community. On the plains and in the valleys the soil is alluvial — lying in places to a great depth — and is very fertile, while the same may be said of the soil on some of the lower slopes of the mountain ranges. Parts of Tasmania are covered by a thick growth of timber, and the selector who takes up land there sometimes has a hard struggle before he can clear sufficient land to obtain a crop, but, when once he has got his holding in productive order, the returns amply compensate. Most of the European grains, fruits and vegetables grow to perfection, and Tasmania has long been a supplier of the mainland markets in the case of the two last named. Tasmanian wheat and barley are held in high estimation by dealers, and usually large yields are registered, but the farmer has to combat both rust and frost, two evils which he is never sure of escaping. In hay, a large export trade is done, and also in

FERN TREE BOWER, MOUNT WELLINGTON
HOBART.

vegetables. Tasmanian products in both these lines being shipped to Melbourne and Sydney, and even further north. In all the chief markets of the mainland, Tasmanian oaten and wheaten chaff and circular head potatoes, are daily quoted and a considerable business is done. But Tasmania is perhaps best known, outside its shores, for the products of its orchards. All the fruits of a temperate climate grow easily there, including apples, pears, apricots, peaches, plums, cherries, strawberries, raspberries and currants. Both in green fruit and in fruit pulp for jam making purposes a big export trade is being done, and in recent years Tasmania has added jam itself to these, several jam factories being already in satisfactory working order. And moreover the Tasmanian trade in green fruit has increased so much that other outlets have had to be found in addition to the markets of Australia. In consequence a trade has sprung up with Great Britain, and during the fruit season, which lasts from about the middle of February to the end of April, the English mail and other steamers call at Hobart for large shipments of fruit, especially apples, which have found a profitable market in old world centres. In the last two years about 3,000,000 cases have been annually shipped, and a large expansion in these figures may be looked for in the near future. In 1902, fruit and jam were exported to the value of nearly £450,000, being an increase of about 30% on the preceding year. The Tasmanian Government followed the example of the other Australian States and made provision to the end that the agriculturalists should receive all the assistance and attention possible. A Council of Agriculture has been appointed, consisting of eleven members whose powers are very considerable. It has appointed Boards of Agriculture throughout the State with whom it maintains correspondence and forwards advice and information on all subjects connected with farming, and for the advancement of agriculture generally. It employs experts in agriculture, fruit growing, dairy farming and poultry raising, the advice and assistance of all of whom being available to those who need it. Dairying in particular has been encouraged in recent years, and butter factories have been established in many parts of the settled area.

According to the latest returns, up to March 1903, the area under crop was 259,611 acres, which total represents a per capita distribution of 1.5 acres per head of population. The main details of the yield for the period under review may be given as follows:— Wheat 49,414 acres, 767,398 bushels; Oats 60,663 acres, 1,612,950 bushels; Potatoes 29,160 acres, 171,298 tons; Hay 66,947 acres, 115,513 tons.

The area under orchards was 14,134 acres, and the yield for 1903 amounted in value to £198,000, giving an average of £14 to the acre.

PASTORAL.

Tasmania, restricted in area as it is, will never be a great pastoral State in the sense that the phrase is applied to the mainland provinces of Australia, and indeed its inhabitants have recognised that fact long since, both by employing the land for the more productive pursuits of agriculture and fruit growing, and by choosing to be studmasters rather than wool growers on a large scale, though wool and other products of pastoral pursuits form no inconsiderable item on the list of exports. But Tasmanian sheepbreeders have now for many years been noted more for the high standard of their breeding, and the large sheep owners on the mainland of Australia draw their best stud rams and breeding ewes for the best strains from the island. Annually at the sheep sales of Sydney and Melbourne, Tasmanian estates are largely represented by stud rams, and high prices are paid to Tasmanian owners by wool-growers in Victoria and New South Wales. Upward of a thousand guineas have been paid for rams from Tasmania, and the money that other growers make from the wool on the sheeps' back is made in Tasmania from the sale of the sheep themselves. There is much excellent grazing land in the State more particularly on the central plateau and on the river flats and hillsides, and many fine pastoral properties are to be seen. The latest returns which show that at the last enumeration, Tasmanian live stock in all three branches were more numerous than they had ever been before, set down the total numbers as follows:— Horses 35,541; Cattle (including dairy cattle) 185,938; Sheep 1,597,053; all excepting sheep showing substantial increases on the previous year's figures.

MANUFACTURES.

Tasmania certainly cannot be considered a manufacturing State inasmuch as neither the resources of the country, nor the density of the population allow of any considerable expansion in secondary production. What of that nature is done up to the present, consists mainly in the preparation of articles of food and drink, and in the reduction and smelting of mineral ores from the mines of the Western and

North Western divisions. Another secondary industry which bids fair to become important is sawmilling, the timber resources of the State being adequate enough to warrant the expectation of a much enhanced development in this direction. The climate is considered especially suitable for malting and brewing, and Tasmanian ales have already found a footing in the other States. Jam making also has reached an export basis, manufacturers recognising that it is more profitable to turn out the finished product than to send away the fruit pulp for the necessary treatment elsewhere. Other minor branches of industry practised in Tasmania which usually come under the heading of manufactures, are tanning, soap and candle works, flour mills, butter factories and aerated water factories. In 1903 there were 426 manufacturing establishments at work in State, giving employment to 7,749 hands.

SPORTING.

Horse Racing, Cricket etc. As might have been expected the sporting proclivities of the Tasmanians approach in their character more nearly to the English ideals than is the case elsewhere. The climate, nature of the country, and the conditions of outdoor life generally serve to remind the immigrant forcibly of the European mother country he has left behind, and in consequence his amusements become in a large measure those which he was wont to engage in before he left for the new fields under the Southern Cross. Cricket and football of course are pursued with the energy those games always engender, and horse racing has its strong contingent of votaries. The two most important clubs are the "Tasmanian Racing Club" with its headquarters at Hobart and a well laid out course at Elswick, a few miles from the city, and the "Tasmanian Turf Club" which holds its meetings on the Mowbray racecourse outside Launceston. Tennis, hockey, cycling and the other usual outdoor pursuits each and all find a place in the amusements of the residents. But the sports of hunting, fishing and shooting are perhaps more enthusiastically followed than they are on the mainland, and Tasmania is earning quite a reputation among Australian sportmen as a place wherein their most favored excitements can be enjoyed to the full. There is a hunt club at Hobart, while the headquarters for coursing are at Launceston, where the North Tasmanian Coursing Club is located; and the London Cup, run in June each year attracts a large number of entries.

Fishing. In most of the rivers and fresh water lakes of the island, trout and salmon have been most successfully acclimatised, and on the great lakes trout have been taken weighing up to ten or fifteen pounds. With fish like these to angle for, it is no wonder that sportsmen are keen on visiting the locality. But even should that be denied them, good sport can be obtained close to Hobart on the Derwent, and especially at New Norfolk, 21 miles distant from the capital. The fishing regulations are strict and framed in the interests of the rod and line. No dynamite or poisons must be used, net fishing is confined within prescribed limits and the young of the salmon and trout, if taken, must be returned to the water, definite directions being given as to what these "young" are. Neither salmon nor trout are allowed to be taken except by a rod and line, and a fishing license must be secured before entering upon the sport. The season for salmon and trout fishing begins on the 1st of September and ends on the 30th of April. The license costs 10/— for the whole season, 5/— monthly, and 2/6 weekly, with a reduction to 5/— for the whole season for youths and ladies. Besides salmon and trout, graylings, blackfish and the cucumber fish sometimes erroneously called herring, abound in most of the rivers. It would be idle to attempt to indicate where and when the best fishing is to be found. One might almost be inclined to say — all over the island, but as some spots are obviously more favored than others and a lapse of a few months may change a well-stocked to a barren stream, it will be best to leave the choice of locality for a fishing excursion, until on opportunity occurs for discussing "the luck" with some resident angler of Hobart or Launceston. The Anglers Club at Hobart is naturally one of a fountain head of information on this score, and its members are always ready to welcome a visiting sportsman. There is also a "Fishing Guide" issued by the Tasmanian Tourists Association, which will be found very useful. Good sea fishing may be had all along the coast, and in the estuaries of tidal rivers, the fish being similar to those found on the coast of the mainland. Among the most common of these are the flathead, whiting (*Sillago ciliata*), the bream, schnapper, perch (*Chilodactylus Macrop-terus*), silver trevally (*Caranx Georgianus*), the Snotgall (*Neptonemus brama*), the garfish (*Hemerhamphus intermedius*) and the trumpeter (*Letris Fosteri* and *Latris Hecateia*). Fishing excursions by steamer are often arranged from Hobart; steamers usually leave Hobart early on Saturday afternoons and return on the same evening. Information as to timetable and bait required etc. can be obtained locally.

Shooting. In shooting also, the Tasmanian Government in past years provided for the sportsman of the present generation by the importation of English game, such as pheasants, partridges, grouse etc. Restrictions are imposed however upon the shooting of imported game, which must not be killed except by a person on his own land, or by his permission. Wild fowl are numerous on the lakes and rivers of Tasmania, but in this case also it is useless to tender advice as to the best place to visit. Good sport is almost sure to be found on the uplands, but it is necessary to know where to go for it, and local knowledge gleaned at first hand by a resident is under these circumstances invaluable. When the sportsman lands with his gun either at Launceston or Hobart he will doubtless find many who will be ready to assist him in his choice of a location. It may however be worth while to add for his preliminary guidance the dates of the open seasons for the different descriptions of game for which he intends to go in search. For wild duck, teal, widgeon, plover, black swan, southern stone plover, ground dove and Cape Bawen goose shooting begins on the 1st of February and ends on the 30th of June; Bronzewing pigeon, 1st of March to 31st of July; Quail shooting 1st of May to 30th of June. Swivel or punt guns for duck shooting are prohibited.

TRAVELLING AND EXTERNAL COMMUNICATION.

Tasmania is easily reached from the mainland of Australia, with which it is connected by regular and frequent services of the Union S. S. Co., and Huddart Parker Co., while during the early part of the year, the English mail steamers, which make Sydney their terminal port, also call at Hobart. Between Melbourne and Launceston (277 miles) steamers run weekly connecting with train to Hobart. The sea passage takes about 20 hours (saloon fares 30/— single and 50/— return), the train to Hobart (133 miles) six hours. Single fares 19/6 first and 13/— second; return fares 39/— first and 26/— second class. This is the shortest route to either town. Between Melbourne and Hobart (457 miles), there is a direct weekly communication, the steamers of the Union S. S. Co. and Huddart Parker S. S. Co. calling there both on their way to and from the Bluff (New Zealand). The saloon fare is 50/— single and 80/— return by both Companies. The Bluff (930 miles) is reached from Hobart in between three days and three days and a half.

Hobart and Sydney (628 miles) are connected by a regular weekly service all the year round, while during the summer season communication is still more frequent. Time between two days and two days and a half. The saloon fare is 50/— single and 80/— return, by both colonial companies, between which tickets are interchangeable. For dates of sailing and further particulars, see Companies' guide books and daily papers.

In Tasmania itself the travelling is mainly done by rail, and coaches running in conjunction with them. The roads are however excellent as a rule, and offer good opportunities to the cyclist, especially on the north and east coast. An excellent cycling map of Tasmania with booklet of information appended (price 1/—) published by Messrs. J. Walch & Sons in Hobart, is available and can be recommended.

It would be futile to attempt any adequate description of the localities worth visiting in Tasmania. A few of the main excursions have been touched upon, but the details must necessarily be worked out by the tourist himself. In that task he will be afforded every assistance by the Tourist Association, and any of the numerous cycle clubs, or by Thomas Cook & Son's Agencies, who will map out "round trips" for him of any combination he likes to choose, smooth his path and prime him with all conceivable information on any point he wants elucidated. During the tourist season the daily press is full of advertisements regarding excursion trips, and there is no scarcity of choice as to where the day or the week shall be spent. For all minor information such as the usual municipal arrangements, cabs and car regulations etc., Walch & Co.'s Tasmanian red book, and the railway time table (1 d.), will be found useful. The Tasmanian Guide Book and Gazetteer (3 d.), published by the Tasmanian Tourists Association, contains a fund of detailed information including hotel prices, cost of travelling etc.

RAILWAYS.

Tasmania was rather late in beginning the construction of her railway system, and it was not until 1876 that the main line from Hobart to Launceston, 133 miles in length, was completed for the whole of its length. The smallness of the island's area as compared with that of the other States, combined with the comparative confinement of the population within narrow limits, did not however necessitate a very great extension, and at the present time there are only 457¹/₂ miles of State owned lines open for traffic. Most of these are built on the 3 feet 6 inches gauge, the change

from the 5 foot 3 inches gauge having been effected from motives of economy in working. But the exigencies of the rapid development of mining in the west and north western districts necessitated a departure from the usual Australian principle that all railways should be State owned, and there are now 160 miles of privately owned railways in Tasmania. These private lines are:— West coast, Emu Bay to Mount Zeehan (98 miles), Lyell to Strahan (22 miles), Gormanston to Kelly Basin (23 miles), and Dundas to Zeehan (7 miles), all on a 3 foot 6 inches gauge. The whole system, State and private, is practically in connection, the junctions being effected either on the main line between Hobart and Launceston, or, in the case of the West Coast private railways, at Burnie, which in turn is joined to the main line by a Government line 99 miles long, at Evandale Junction. The north east is served by a line 47 miles in length running from Launceston to Scotsdale, and at Conara the East Coast line branches to St. Mary's (47 miles), with a feeder to the Fingal coal mines. At Bridgewater on the main line, the Derwent Valley line diverges to Glenora (15 miles). Another short line runs from Pontville to Apsley. The control of the railways is in the Department of Lands and Works under a general manager. The authorities pay special attention to the holiday traffic in the summer, and besides, substantial reductions in the fares, organise frequent excursion trips to the various places of interest at greatly reduced rates. Full particulars of these trips are duly advertised in the daily press, and all the required information concerning them can be readily obtained from the Station-masters. The regulations regarding the carriage of luggage, booking office rules and cloak room charges are similar to those obtaining on the mainland. Passengers holding return tickets for distances above ten miles may break the journey either going or returning. Adult passengers are allowed 112 lbs. of luggage each, of wearing apparel only. Excess luggage is charged for at the rate of 1/— per 56 lbs. for every 50 miles. No luggage which will inconvenience other passengers is allowed in the carriages.

HOBART.

Hobart, the capital city of Tasmania, 42° 53' 32" south latitude and 147° 21' 20" east longitude, is picturesquely situated on the northern bank of the River Derwent, about twelve miles from the sea. The river is easily navigable to the town even for the largest steamers visiting the port,

and is well sheltered. For the most part the town lies between the river on the one side, and Mount Wellington on the other, the lofty slopes of the latter, with an altitude of 4,166 feet, dominating the town as its background. Hobart, or Hobart-Town as it was called until 1881, is the second oldest town in the Australian Commonwealth, having been founded in 1804 by Lieutenant Colonel Collins who was sent there from Sydney. Its early years were passed among scenes, in front of which it is best to draw a veil. The "System", as the disciplining of the criminals was generally termed, held full sway, and Hobart in particular and Van Diemens Land in general earned a most unsavoury reputation. But with the withdrawal of the convicts, Hobart lost its notoriety, and present day Australians know it only as a pleasant holiday resort, where the hot and enervating climate of many parts of the mainland can be exchanged for a bracing atmosphere and natural beauties of scenery such as are more rarely found in Australia. The summer or floating population of Hobart is a large one, and its citizens mindful of the fact that its visitors contribute largely to the prosperity of the town, bend all their energies to making their stay as pleasant as possible. It must not however be thought that Hobart is only a tourist town pure and simple. The agricultural district for which it acts both as an export town and a distributing centre, is a fertile and a flourishing one, and naturally Hobart both contributes to and reaps the benefit of its prosperity, and a very considerable amount of trade passes over its wharves during the year. Both interstate and oversea vessels make it a regular port of call, and in farm and dairy produce, to say nothing of the fruit export in the autumn, Hobart finds a very lucrative shipping business.

There are within the town boundaries a few manufacturing, and the streets are lined with fairly good shops, and though small as compared with the great cities of the mainland, Hobart can lay claim to consideration as a commercial centre of some importance.

Area, Population etc. Hobart has an area of 1,270 acres, and a population including suburbs of 34,626. The city has been under Municipal Government since 1857, the corporation consisting of a Mayor and nine aldermen.

Climate. The climate of Hobart is equable and invigorating, the mean temperature for the last fifty years being 55°. Few excessively hot days are experienced, and a bracing sea breeze is of almost daily occurrence in the summer. The rainfall averaged 25.10 inches over a long series of years with 167 wet days per annum.

HOBART AND MT. WELLINGTON
FROM BELLERIVE

Streets. The city is well laid out, wide streets intersecting one another at right angles, of which the principal are Macquarie, Collins, Elizabeth, Liverpool and Murray Streets, the latter three being the main centre of retail business. In all there are about 35 miles of thoroughfare, under the control of the Municipality. The town is lighted both by gas and electricity, and an efficient water supply is drawn from springs on Mount Wellington, the storage reservoir on the Sandy Bay rivulet having a holding capacity of a hundred million gallons. From it two ten-inch mains supply the distributing reservoir in Hill Street, whence the water is reticulated throughout the city and suburbs.

Arrival from the Mainland. Hobart may be reached either by the direct sea route from Melbourne or Sydney, to and from which cities steamers run weekly or oftener, or in the case of those who do not care to face so long a sea journey, overland from Launceston. Two steamers weekly make the return trip between Melbourne and Launceston, leaving the former in the afternoon and arriving at Launceston in the forenoon of the following day. A railway connects Launceston with Hobart and the journey of 133 miles is accomplished in six hours, single fares 19/6 first and 13/— second class, return fares 39/— and 26/—. Three trains run daily.

Railway Station. The Hobart Railway Station, between Macquarie and Liverpool Streets is conveniently situated for the centre of the city, which can be reached in a few minutes either by tram 2d., or cab 1/—. The wharves, where passenger steamers land, are also within a few minutes' walk from the centre of the town. Both steamers and trains are met by cabs and carriers.

Tramways. Electric Trams run from the Railway Station to the Cascades, Upper Macquarie Street (three miles), from the corner of Elizabeth and Macquarie Streets to Sandy Bay (three miles), and from the same terminus to Newtown (three miles), beyond the Queen's Domain. Cars leave every 15 minutes for Newtown, and every 20 minutes to the Cascades and Sandy Bay. The fare is 3d. to each terminus, Section fares 2d.

Public Vehicles. Public carriages are available for hire at the following rates:— For any distance not exceeding one mile, 1/—, and 6d. for every additional half mile. Return fare, if carriage has not been delayed for more than five minutes for each mile, is half the above. For every package

carried outside the cab, 3d. extra is payable. Fares by time are charged for at the rate of 2/— for any time within 30 minutes; 3/— within 45 minutes; 3/6 within one hour; 6/6 within two hours; 9/— within three hours; 11/— within four hours, and 6d. for every additional twenty minutes. Between the hours of 10 p. m. and 6 a. m. half additional fare is chargeable. If the vehicle is required by time, this should be agreed upon at time of hiring, as otherwise distance fares are charged.

Boats. Watermen ply between the shore and vessels lying in the stream within the boundaries of the harbour, the charge being 1/— for each person for the single, and 1/6 for the return journey, providing the boat is delayed for no longer than ten minutes. 50 lbs. luggage is allowed free, but one adult fare is charged for the first 50 lbs. of excess luggage and half fare for every additional 50 lbs. For vessels lying in the stream unmoored, half additional fare is chargeable.

The harbour limits consist of a line drawn from Macquarie Point to Sandy Bay Point, intersected by a line bringing the two flagstaffs on Battery Point in one. Pleasure Boats including the service of a waterman can be hired at the rate of 2/6 per hour. Boats without attendance are 2/6 for the afternoon.

Steamers. — Bellerive. Steamers leave for Bellerive, on the opposite shore of the Derwent, at frequent intervals. Fare 3d. single, and 4d. return.

To **Beltana**, a little higher up the river, there is also a regular but less frequent service. Fare 3d. single, and 6d. return.

Steamer for New Norfolk leaves Brooke Street Pier daily (Wednesdays and Saturdays excepted), at 9.15 a. m. Return fare 2/6.

Hotels and boarding Houses. The principal hotels in the city are:— "Hadley's Orient Hotel", Murray Street, 11/6 per day; "Heathorns' Hotel", Liverpool Street, 10/6 to 12/— per day; "The Imperial Coffee Palace", Collins Street, from 7/— per day, and from 42/— per week; "Highfield Hall Hotel", Murray and Bathurst Streets, 10/— per day, 63/— per week; "Freemasons Hotel", Harrington Street, 6/6 per day, 40/— per week; "Criterion Hotel", Liverpool Street, 6/— per day, and others charging as little as 4/— per day, and 25/— per week. Visitors preferring to stay out of town, "The Fern Tree Hotel" on the Huon Road, about half way up Mount Wellington, is well situated and can be recommended to visitors preferring to stay in the country, yet within reach

of the city. It is reached by coach from Hobart, fare 3/— return. The tariff is 8/— per day, and 45/— per week. Another pleasant spot to stay at is Brown's River Beach, 11 miles from Hobart, where there are several hotels and boarding houses. The "Australian Hotel" at this place, offers good accommodation at 8/— per day or 50/— per week.

There is a choice of a great number of boarding houses, both in the city and suburbs, the charges ranging from about 4/— to 8/— per day, and 25/— to 63/— per week. A list of hotels and private accommodation houses, is published periodically by Thos. Cook and Son, and can be had free of charge on application.

Public Buildings:— The **Town Hall** of Hobart, which is located upon a square formed by Macquarie, Dowey, Elizabeth and Argyle Streets, with its main front facing the first named, is built of Tasmanian brown and white freestone in the Italian style of architecture. The Hall itself is a commodious room 78 feet by 40 feet, and 38 feet high, and is much in demand for social functions and musical entertainments. The west wing of the building contains the Tasmanian Public Library, and the east wing the Council Offices and Chamber of Commerce.

Government House situated on the Queen's Domain, is a handsome pile of buildings built of white freestone. It is claimed by Tasmanians, that for architectural elegance, beauty of site and excellence of internal arrangements, the Hobart Government House stands first among those of the Australian Colonies.

The Tasmanian University, also in the Domain, is a fine building in the Elizabethan style. The Public Offices in Murray Street are a substantial block in freestone and cover an extensive area.

The General Post Office, at the corner of Macquarie and Elizabeth Streets, ranks as one of the finest buildings in the city. Its foundation stone was laid by the present Prince of Wales during his visit to Australia in 1901.

Parliament House is an old structure near the bank of the Derwent. It was originally designed for a Custom House, but when Tasmania was erected into a self governing colony, part of it—and eventually the whole of it—was appropriated for legislative purposes. It is open daily to visitors from 10 a. m. to 4 p. m., and contains a library of some 8,000 volumes, which are open to the perusal of any person on an order from a member.

The Custom House is a new building near the wharves.

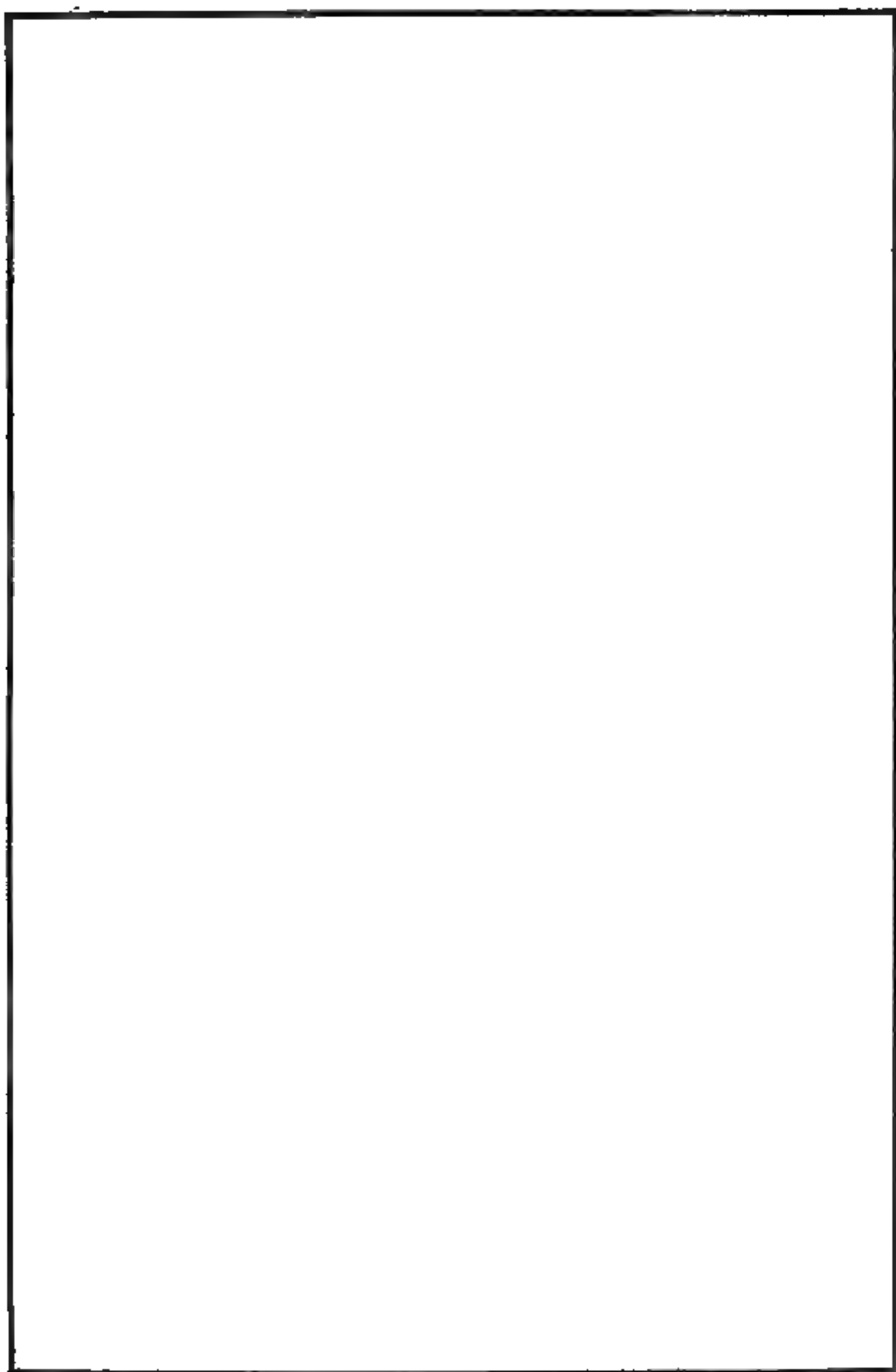
Many of the Banks and public institutions are well housed in structures that partake both of the ornamental and the substantial, the ample supply of freestone available giving an air of solidity to the streets, which is lacking in other Tasmanian towns such as Launceston, dependent as it is on bricks and cement for its building materials.

Banks. The offices of the Banks doing business in Hobart, are situated as follows:— Bank of Australasia, — Elizabeth Street; Commercial Bank of Tasmania Ltd., — Macquarie Street; Union Bank of Australia Limited, — Elizabeth and Collins Streets; State Savings Bank, — Macquarie and Elizabeth Streets; Hobart Savings Bank, — Murray Street.

Consulates. Belgium, — Elizabeth Street; Denmark, Sweden and Norway, — 103 Macquarie Street; France, — Franklin Wharf; Germany, — 102 Macquarie Street; Netherlands, — Murray Street; United States, — 32 Elizabeth Street.

Churches. Hobart has in proportion to its population certainly a sufficiency of churches and chapels, the number of places of public worship exceeding forty. "St David's Cathedral" (Church of England) is situated in Macquarie Street opposite the old Post Office, and is one of the oldest buildings in Hobart, its foundation stone having been laid in 1817. The Churchyard contains monuments of several well known colonists of the early days. The Roman Catholic Cathedral ("St. Mary's") in Harrington Street, is a imposing structure set off by the handsome lines of "St. Mary's" Presentation Convent which is built in the same enclosure. Churches also worthy of mention are "St. George's Church" (Church of England), with its Grecian front and its composite tower and cupola; "St. Trinity Church" (Church of England), in Warwick Street with a peal of eight bells; "St. Joseph's" (Roman Catholic) formerly Protestant Cathedral; "St. Andrew's" (Presbyterian) in Bathurst Street, pleasantly enbowed in trees and shrubs; Chalmer's Free Church at the corner of Bathurst and Harrington Streets; the Congregational Memorial in Elizabeth Street, a very handsome Gothic building with a high pitched roof and a graceful spire; the Wesleyan Centenary Church in Melville Street, which, though large and commodious, has no pretensions to architectural beauty; the Baptist Tabernacle in Elizabeth Street, built on the lines of Spurgeon's Churches in England. The meeting house of the Society of Friends is in Murray Street, and the Jewish Synagogue in Argyle Street.

●



Charitable Institutions. The Hobart General Hospital has 20 wards and 140 beds, the visiting days are Sunday, Tuesday and Thursdays between the hours of 2.30 to 4. p. m., and at other times by permission of a member of the medical staff.

At the Cascades there is a hospital for contagious diseases with a capacity of 20 beds.

At Newtown, the Invalid Depot stands on a large area of land commanding a fine view of the valley of the River Derwent and the surrounding country, both buildings and grounds being admirably adapted for their purpose. Accommodation is afforded for 500 males and 200 females. Orders for admission are issued by the Administrator of Charities to the sick and indigent who are detained usually for three months.

A Homeopathic Hospital has been established at "Wellington Grange", Upper Macquarie Street, and is supported by voluntary contributions.

The Boys Training School at Newtown, designed for the reformation of criminal youths under magisterial sentence, has accommodation for about 60 inmates. Besides the ordinary school work, the boys are instructed in various useful trades, and the old Government farm and "Derwent Park" are cultivated and managed in connection with this school.

In Barrack Square there is a Girls Training School and Reformatory where young women under 18 committed by the Magistrate on a first offence, are taught reading, writing, etc., and trained in domestic duties which fit them for the situations they usually secure on leaving the institutions.

Postal Arrangements. Mails for Europe are made up weekly for transmission via Suez or America. A signal is hoisted at the Post Office on the arrival of English, Foreign, or interstate mails, and taken down when the mail is ready for delivery. The mail closes at 6 p. m. on European mail days, but late letters may be posted up to 7 p. m. at an extra single rate of postage.

Fire Brigade. The headquarters of the Hobart Fire Brigade are in Bathurst Street, with a second station in Argyle Street, and reel sheds at West Hobart, Newtown and Sandy Bay. The plant consists of 2 manual fire engines, two horse hose reels, four hand hose reels, a fire escape and 3,010 feet of hose. A system of telephonic fire alarms is installed throughout the city.

Press. There is only one morning daily newspaper published in Hobart — The "Hobart Mercury", and one evening paper — the "Tasmanian News". The "Tasmanian Mail", issued from the Mercury Office, and the "Clipper", are weekly publications, and there are several monthly periodicals chiefly of a religious or other special character.

Baths. The Hobart Bathing Association, formed with the object of securing a sufficiency of bathing accommodation for the city, have succeeded in securing the erection in the Domain of spacious baths, salt and fresh water (hot and cold), with every accommodation for ladies and gentlemen, and within ten minutes' walk of the city. Subscription baths (salt water) are also open at Sandy Bay, and there is a Turkish Bath at the corner of Collins and Harrington Streets. Tuesdays and Fridays are set apart for ladies, on other days, Sundays excepted, the baths are available for men.

PLACES OF INTEREST AND AMUSEMENT.

Theatres etc. There is only one theatre in Hobart, the "Theatre Royal" in Campbell Street, but there are several halls used for the purpose of public meetings, concerts, social functions, and other entertainments. These include the Town Hall in Macquarie Street, the Freemasons Hall in Murray Street, the Temperance Hall in Melville Street, the Oddfellows Hall in Victoria Street, the Tasmanian Hall in Harrington Street, the Memorial Hall in Brisbane Street and the Peoples Hall and the Institute Hall in West Hobart.

Museum, Art Gallery etc. The Tasmanian Museum and Art Gallery occupy the same building at the corner of Macquarie and Argyle Streets. The collection of Natural History specimens in the Museum is attractive, the Tasmanian room being especially worth a visit, while the ethnological section is full of interest because of the fine skull collection of the now extinct Tasmanian aborigines, one of the oldest races of mankind that the scientific world has had a chance of examining.

The Art Gallery, which is of comparatively recent date, contains a few fine specimens of work from the brush of some notable English Artists, Poynter among others, and also a not inconsiderable collection of colonial paintings, among which a number of works by W. C. Piguenit, a

Tasmanian landscape painter, are the most prominent. Both collections are under an energetic management and are much better than could be expected in so small a town.

The public are admitted to the Museum and Art Gallery from ten to five in summer, and from 10 a. m. to 4 p. m. in winter. Sundays 2.30 to 5 p. m. On Mondays the institution is closed.

Public Library. A wing of the Town Hall has been devoted to the housing of the volumes of the Hobart Public Library, numbering some 16,000 to 20,000. There is a reading room well supplied with English and Australian newspapers and periodicals. The institute is open from 10 a. m. to 9.30 p. m. on week days, and from 2 to 6 p. m. on Sundays.

Clubs and other Associations. The Tasmanian Club, 44 Macquarie Street. Non residents of Tasmania may be admitted as honorary members for fourteen days by the Committee, with reduced fees for any longer time. Hobart Club, Collins Street. The same rules as to honorary members apply.

Athenaeum Club, corner of Macquarie and Harrington Streets. Similar honorary members rules apply.

Hobart Club, Collins Street.

Commercial Club, Bathurst Street.

Military Club, Murray Street.

South Hobart Club, Macquarie Street opposite "All Saints Church".

There are also a number of Sporting Associations including, Anglers, Cycling and Hunting Clubs.

The Royal Society of Tasmania, founded in 1843, has its room in the Museum Building. The Society has over one hundred members and holds meetings, to which the public are admitted, once a month from April to November. A splendid library is also connected with the Society.

Gardens and Parks. The Queen's Domain, a spacious reserve of 680 acres, covers an elevation on the northern boundary of the city, close to the railway station. The Domain, which is only partially laid out, is traversed by easy-graded carriage drives, and affords fine panoramic views of the city, the River Derwent and the surrounding districts, from its highest points. A Cricket Ground has been formed in the Domain, and other expanses are devoted to such sports as lawn tennis, bowls etc.

The Tasmanian University, stands in the grounds of the Queen's Domain, immediately opposite the Railway

Station. The University was established on the 1st of January 1890, and is under the direct control of a council of members, half of whom are elected by the Senate of the University, and half by both Houses of Parliament.

The Botanical Gardens, situated on a slope overlooking the Derwent between Government House and Cornelian Bay, are also part of the Queen's Domain. These gardens, sometimes referred to as the Royal Society's Gardens, cover some 25 to 30 acres, and are a favorite resort on Saturday and Sunday afternoons. There is an excellent collection of pines there from all parts of the world, and the cool shrubberies, shaded seats and bright parterres of flowers make it an attractive place for an afternoon's stroll. The distance from the city is about one mile. The gardens are open on week days from 8 a. m. to 6 p. m., and on Sundays from 2 p. m. to 6 p. m.

Franklin Square near the centre of the town, adorned with a statue of the late Sir John Franklin, a former Governor of Tasmania, but known more to fame as an arctic explorer, is pleasantly laid out as a garden and provided with seats. There is a recreation ground near the Barracks, and another at Princes Square, the latter affording excellent views of the city and harbor. In the Barrack Reserve, formerly the headquarters of the Imperial Military forces stationed at Hobart, stands a monument erected to the memory of officers and men of the 99th Regiment, who fell in New Zealand during the Maori war in 1845—6. There is also a spacious recreation ground at North Hobart.

EXCURSIONS.

Within ten miles of Hobart are many picturesque scenes to which some pleasant afternoon or whole day excursions may be arranged at a moderate outlay. A drive of ten miles, for example, brings the traveller to Glenlusk, Molesworth and Bismarck, on the northern slopes of Mount Wellington; the latter place settled principally by German immigrants. From all of these three, charming views may be obtained. Coaches run twice daily to Brown's River, ten miles from Hobart, the road along the Derwent affording pretty little glimpses of the mountain and river. A good idea of the grand forest and mountain scenery can be obtained by travelling some 20 miles on the Huon coach, and then transferring to the up coach which meets it about that distance outside of Hobart. But if a longer visit is possible, and it is well worth while, the

IN THE BOTANICAL GARDENS, HOBART.

journey should be made by steamer to Port Cygnet, or Esperance, and the return by coach. A few days spent in the Huon district will certainly repay either the seeker after scenery, or those interested in economics, for not only is the picturesque abundantly evident, but the fruit growing and timber-getting are lucrative branches of industry throughout the district. Shooting and fishing are also readily procurable. The following are a few of the most popular outings:—

Mount Nelson. From the Signal Station on Mount Nelson, to the south of the city, a fine view is obtainable of Bruny Island, D'Entrecasteaux Channel, the harbour and the city of Hobart. The summit which is about 200 feet high, can be reached by tram to Sandy Bay (3 d. each way), thence on foot.

Brown's River Beach. A popular resort on the western shore of the Derwent, distant eleven miles from Hobart. There are several hotels and boarding houses. Two coaches (9 a. m. and 4 p. m.) leave Hobart daily for here, fare 3/— return. During the summer months a "brake" leaves Hobart at 2 p. m., returning by 6 p. m. Return fare 3/—. River steamers also make one or more excursions a week in the season; return fare 1/—. For pedestrians a pleasant way of doing this tour is to take the steamer to Brown's River and walk back to the tram terminus (6 miles).

The Fern Tree Bower and Silver Falls are situated on the slope of Mount Wellington, at a distance of five miles and a quarter from Hobart. Two mountain streams, which form part of the city's water supply, unite at this point and are filtered through screens into a stone aqueduct leading to the city reservoirs. Fern Tree Bower is a popular picnic spot and fire places and shelter sheds have been erected for the use of picnic parties. There is also a hotel ("Fern Tree Hotel") and several boarding houses. The Silver Falls are a few hundred yards above Fern Tree Bower. Coaches leave Hobart for Fern Tree daily at 9 a. m. and 4 p. m. Single fare 2/—, return fare 3/—.

Mount Wellington and the Springs. Mount Wellington, the second highest mountain in Tasmania (4,166 feet), is the favorite object for excursions in the neighborhood of Hobart. The mountain can be ascended without great difficulty, and offers beside a magnificent view from the summit, fine forest scenery, fern gullies, waterfalls and other scenic attractions. The summit is best reached from

the "Springs", situated on its eastern slope at a height of 2,872 feet above sea level, where meals and accommodation is procurable. The Springs can be reached on foot from Fern Tree, a distance of about $1\frac{1}{4}$ miles, or by vehicle from Hobart (8 miles). The cost in the latter case being 20/— (for the whole day) for a vehicle seating between five and six persons, or 4/— return by "brake", a number of which, during the summer months, ply frequently between the city and the springs. There is also a shelter shed at the Springs for the use of picnic parties, and hot water is procurable free of charge on application to the caretaker. From the springs the ascent to the "Pinnacle", the highest point, must be made on foot, the distance being about three miles. Immediately below the Pinnacle are the "Organ Pipes", precipitous columns of basaltic formation, about 800 feet in height. Near the Pinnacle there is a hut used as a meteorological observatory, and a beacon, erected many years ago by the Trigonometrical Survey party. In August 1903 two fatalities occurred during a race to this point, arranged by a firm for the purpose of advertising a certain brand of whisky: two of the competitors, who were too lightly clad for the race, succumbing during a snow storm which raged on the mountain at that time.

NEW NORFOLK.

An enjoyable excursion by rail, river or road is that to New Norfolk, 21 miles from Hobart. A steamer runs daily during the summer season (from 1st January to 30th April) leaving Hobart at 9.15 a. m. and returning on the same day. This method is decidedly the best way of getting to the old township, situated among its hop gardens and orchards, with its substantial old homesteads shaded by willows and other English trees. The river trip occupies about two hours and a half, Return fare 2/6. The salmon and trout ponds, where the ova are hatched out, are situated about seven miles from New Norfolk, on the River Plenty near its junction with the Derwent, and can be reached by buggy or rail. Other excursions in the neighborhood are to Myrtle Falls and Hachlan, and another favorite picnic ground is up the valley of the Back River on the northern side of the Derwent to its source in the Domedary Marsh. The Russel Falls, situated $12\frac{1}{2}$ miles from Glenva, can be reached from New Norfolk over a good road. The upper and lower falls combined attain a height of 170 feet, and the broad sheets of water falling over the black basaltic terraces form an impressive picture.

THE RIVER DERWENT AT NEW NORFOLK

TASMAN'S PENINSULA.

Another location reached from Hobart is Tasman's Peninsula which is as lovely in its scenic interest as its historic memories are gruesome. The old convict settlement of Port Arthur was located here, and many are the stern and awful stories that centre round it. (For particulars see Marcus Clarke's "For the Term of His Natural Life", and "The Adventures of Martin Cash".)

Cape Raoul is also one of the chief scenic attractions of the Peninsula, the fluted basalt columns of the headland rising sheer out of the sea to a height of 400 feet. In former times this remarkable cape was still more imposing, but it has since suffered through the vandalism of a gun-boat commander, who selected it as an object for target practice. The cape is passed by the steamer on the way to Port Arthur.

Eagle Hawk Neck. In the centre of the Peninsula there is a narrow isthmus known as "Eaglehawk Neck", which offers the only connection with the mainland. The lower portion of the Peninsula where the convict settlement was situated formed a natural prison, and convicts had no other means of flight than across this narrow neck of land, which was however so well guarded by sentries, and blood-hounds chained in a line across the isthmus, and further by the sharks which abounded in the sea on either side, that successful escapes were matters of rare occurrence.

Other spots of interest near by are the "Tesselated Pavement", a curious formation on the sea shore, Tasman's Arch, and the Great Blow Hole, which also figures in Marcus Clarke's book already mentioned. There are several boarding houses at Eaglehawk Neck, the tariff ranging from 6/— to 10/— per day, and from 25/— to 50/— per week.

Eaglehawk Neck may be reached either overland, or by sea. Steamers leave Hobart every Monday and Thursday at 9 a. m., arriving at Taranna at 2 p. m. (fare 5/— return). From Taranna to Port Arthur (7 miles) the journey can be continued by vehicle (fare as per arrangement) or by bicycle. Steamers return to Hobart on Tuesdays and Fridays.

If the overland route is chosen, the traveller leaves Hobart by ferry steamer for Bellerive at 9 a. m., thence by rail to Sorrel, which is reached at 10.25. From Sorrel to Dunalley (21 miles) by vehicle, and on to Eaglehawk (12 miles) arriving there at 4.30 p. m. Port Arthur (12 miles) can be reached from here in about two hours.

Port Arthur. At Port Arthur, now called Carnarvon, there are still evidences visible of the old convict settlement. Close to the land, in the beautiful bay on which Port Arthur lies, is the Isle of the Dead, which as its name implies was the old burying ground. At Point Puer, close to the island, the foundations and dungeons of the old prison for boys may still be seen, and at the township itself, the old ruined church and the residence of the Commandant, which now serves as a hotel.

Some three miles from here are the "Remarkable Caves" and several blow holes. The terraced quarries, from which the building stone for the old settlement was obtained, is about a mile distant from Port Arthur. Port Arthur can be reached overland as described or by sea (fare 5/— return), steamers leaving Hobart every Monday and Thursday, and returning every Tuesday and Friday.

THE LAKES DISTRICT.

Of recent years, a visit to the freshwater inland lakes, has become a favorite tour with the tourist, not only for the sport offered — there is good trout fishing and shooting — but also on account of the bracing climate and romantic scenery. The lakes, of which there are a considerable number, both large and small, lie at elevations of between 2,700 and 3,800 feet above sea level, on the south-eastern portion of the basaltic tableland which occupies the centre of the island.

Among the best known and largest lakes are:— Lake St. Clair, The Great Lake, Lake Sorrel, Lake Crescent, Lake Ida, and Lake Echo.

Lake St. Clair (time required about seven days). For picturesque beauty Lake St. Clair, the westernmost of the lakes, which has been named the Killarney of Tasmania, is considered to rank first. This lake in which the River Derwent takes its rise, lies surrounded by forest-clad mountains, among which Mount Olympus, rising 2,300 above the level of the lake, is the most remarkable. Mount Ida is visible on the opposite shore. Lake St. Clair has a length of nine, and an average width of two miles, and is the deepest of Tasmanian lakes, having a greatest recorded depth of 550 feet.

At the lake the Government maintain an accommodation house with boats and other conveniences for enjoying the beauties of the surrounding sights. The scenery affords a never ending source of delight to the artistic sense and round about the main lake are scattered smaller lakes such as Lake Ida, each with its own distinctive beauties. A month could readily be spent in the lakes district without one

becoming weary of nature's handiwork, and it only requires its accessibility to be made easier to raise it to one of the most popular resorts in Tasmania. At present its very isolation perhaps ensures the quiet charm of the densely wooded hills, towering sometimes into mountains untrodden as yet by excursionists.

Lake St. Clair is 114 miles from Hobart, sixty miles of which is done by rail and coach, and the remainder by privately hired vehicle.

Train leaves Hobart at 8.10 a.m. for Macquarie Plains ($35\frac{3}{4}$ miles), arriving at 10.8 a.m. (Return fare 10/6 first, and 7/2 second class). From Macquarie Plains by coach to Ouse (24 miles), the fare is 13/— return. The coach connects with morning train, arriving at Ouse at 1.45 p.m. On the return journey, coach leaves Ouse at 12 a.m., arriving in time to catch 4.17 train for Hobart at Macquarie Plains. From Ouse to the lake (55 miles) a private conveyance must be procured (fare as per arrangement). From Hobart to Ouse (good accommodation and trout fishing), there is a good cycling road, and even ladies will find little difficulties in negotiating that distance. The last stage of the journey from Ouse to the lake should however not be attempted by cyclists, at least not by ladies, not so much on account of the road, which is fairly good if some steep grades are excepted, but because there is no habitation between Dee Bridge and the lake except a shepherd's hut (eight miles from the lake).

Lake Echo, which offers some fine scenery and trout fishing, is about five miles from Dee Bridge on the road to Lake St. Clair, and may be included in the itinerary if so desired.

Lakes Sorrel and Crescent (two days' trip). These lakes are more easily accessible than the last named, being situated 15 miles from Turnbridge, a station about half way between Hobart and Launceston on the main railway line.

Turnbridge is reached by train from Hobart (departs 8.10 a.m.) in three hours and 39 minutes, the return fare being 21/10 first, and 14/6 second class. From Launceston, the journey occupies about four hours, the fare being 17/4 and 11/8 first and second class respectively. From Turnbridge the journey is resumed by coach to Interlaken, between the two lakes, where there is a good accommodation house. The return fare is 15/—. The regular weekly coach leaves Turnbridge every Friday in time to connect with the Hobart Express. Special trips are run by arrangement. The whole journey to Interlaken can also be made per bicycle, either from Hobart or Launceston, the road being excellent all the way.

The Great Lake. This lake is the favorite resort for anglers, the efforts to acclimatise both trout and salmon, having been successful, and numerous fish of great size are now continually being caught by local and visiting sportsmen.

The accommodation house at the lake may be reached either by conveyance or bicycle from Interlaken (30 miles) or (from Hobart) by rail to Apsley (departs 10.30 a. m.). Return fares: 13/— first, and 8/8 second class. From Apsley the journey is continued by coach to Bothwell (leave Apsley at 2.15 p. m., arriving Bothwell 3.45 p. m. Return fare 5/—). From Bothwell to the lake (24 miles), the journey may be made either by vehicle (fare as per arrangement) or per bicycle, which latter mode of travelling may also be resorted to for the whole journey from Hobart (84 miles), the whole run having been accomplished by some cyclists in eleven hours.

THE EAST COAST.

The main centres of attraction on the east coast are Swansea and Spring Bay, from the latter of which, Maria Island, distant 11 miles, (accommodation 6/— per day, 30/— per week) is accessible by boat.

Swansea, so named from the great number of black swans frequenting its neighbouring waters, is during the shooting season a much frequented resort for sportsmen, who can also find good duck and kangaroo shooting in the neighbourhood. Sea fishing may also be indulged in at any time. The scenery is picturesque and a fine ten-mile beach where a variety of shells can be gathered, renders Swansea particularly suitable as a summer resort for families, good boarding house accommodation being obtainable at 5/— and 6/— per day, and 25/— to 30/— per week.

Swansea may be reached from Hobart by bicycle, the road being good all the way, and accommodation procurable at suitable intervals; and by rail and coach. 9 a. m. steamer to Bellerive connects with 9.30 train to Sorell (14³/₄ miles), the return fare being 4/6 first, and 3/2 second class. From Sorell coach connecting with train leaves for Swansea on Tuesdays, Thursdays and Saturdays, arriving at Triabunna (Spring Bay) at 4 p. m., at little Swanport at 5.45 p. m., and at Swansea at 8 p. m. The return fares being 11/— single and 20/— return to Triabunna, and 20/— single and 30/— return to Swansea.

Maria Island, which was formerly a penal settlement, can, besides from Spring Bay, be reached from Hobart by

(weekly) steamer. Many relics of the early convict days are still in evidence, and of the buildings, the church, the officers' quarters and mess room, the cells, and the cottage of Smith O'Brien the Irish patriot, as well as an old windmill dating from 1846 are still standing. The ancient graveyard is also full of interest, some historical names, among others that of a Maori chief who was exiled to Tasmania after the Maori war, being inscribed on the weather beaten tombstones.

George's Bay, some distance further up the coast, is an ideal retreat for the sportsman, good sea and river fishing as well as shooting (kangaroo, wallaby and waterfowl) being obtainable. The St. Columba Falls, the finest waterfalls in Tasmania, are also in the neighbourhood. St. Helen's, the township on George's Bay, lies 24 miles to the northward of St. Mary's, the terminus of the west coast railway, from where it can be reached by connecting coach.

THE WEST COAST.

The rugged west coast which presents some of the boldest and most picturesque scenery of Tasmania, may be reached from Hobart by tri-weekly steamers of the Union Co. (vide U. S. S. Co's. guide) to Macquarie Harbour, historical as the site of a penal settlement in the early part of the last century. From Strahan the Port of Macquarie Harbour, where there is good hotel and boarding house accommodation, the principal tin and silver mines and other points of interest are easily accessible. Of scenic interest in the neighbourhood are the Gordon River, flowing into the southern end of Macquarie Harbour, and the King River near Strahan. The Gordon River, which is navigable for 22 miles offers good sport, swan and ducks being plentiful. Steam launches for the purpose of visiting the river may be hired at reasonable rates from the agent of the Union S. S. Co.

Teekapoona and King River. From Strahan launch runs twice daily to Teekapoona, the starting point of the Mount Lyell Company's railway, the return fare being 3/6.

Old Penal Settlements. The ruins on Sarah and Settlement Islands and other remnants of the convict days should also be visited, as well as Kelly Basin, now rapidly coming into prominence as the starting point of the new line of railway to Mount Lyell via Gormanston. The return fare to Kelly Basin is 5/—.

Zeehan (29½ miles), the important mining centre, which until a few years ago was an unexplored wilderness, may

be reached from Strahan in two hours and 25 minutes, the return fare being 9/— and 6/—.

Mount Lyell, in the immediate neighborhood of Queenstown, a township with 2,500 inhabitants, is the principal copper mine in Tasmania. It was discovered and worked for gold in 1886, but it was not until it was worked with a view to extract the copper and silver and after the Mount Lyell Company had spent over £400,000 on developmental work and railway construction, that the mine showed any return. The output from the group of mines belonging to the Company during the year ending 30th of June 1901, was 9,132 tons of copper, 619,734 oz. of silver, and 22,911 oz. of gold. A bonus of £13,750 was paid in that year, in addition to dividends amounting to £110,000.

Mount Lyell may be reached by daily train from Strahan (Regatta Point), or on Thursdays only from Kelly Basin (train departs 9 a. m.). Trains leave Regatta Point at 10.45 a. m., arriving at Mount Lyell at 1.30 p. m. Return fare 20/— first, and 17/— second class; Excursion fares (Saturday to Monday) 16/6 and 13/6.

Mount Bischoff. Mount Bischoff, the greatest tin mine in Australasia, which has paid dividends of about two million pounds sterling on a paid-up capital less than twelve thousand pounds, is situated about a mile from Waratah. It can be reached either from Strahan via Zeehan on the west, or from Burnie on the north-west coast. Single fares from Burnie to Waratah 15/— first, and 12/6 second class, and 25/— first, and 20/— second class return. The train which leaves Burnie at 8 a. m., arriving at Waratah at 11.20 a. m. The down train leaves Waratah for Burnie at 2 p. m. Burnie can be reached from Launceston by steamer or rail, the journey in the latter instance (111½ miles), occupying 5 hours and 50 minutes. The fares are 15/— first and 10/— second class single, and 30/— first and 20/— second class return.

From Hobart to Launceston. There are three trains daily from Hobart to Launceston (133 miles) and vice versa, the express train leaving Hobart at 8.10 a. m. and arriving at Launceston at 2.4 p. m. The fare is 19/6 first and 13/— second class single, 39/— first, and 26/— second class return, and 22/2 first and 16/8 second class holiday excursion. From Launceston express leaves at 11.20 a. m. arriving at Hobart at 5.18 p. m.

Cyclists will find the road (121½ miles) a good one, and though an elevation of 1,400 is attained the grades are easy, and there is a corresponding down grade to compensate.

the
d of
the
and
rked
the
top-
une
nes
of
er
in
d.
n
n
t

LAKE ST. CLAIR, TASMANIA.

Th
re
pr
ar
sa
L

is
th
fr
It
a
f
a

I
I
t
l
c
I

The usual time taken by a cyclist is about 10 hours, the record trip so far being 7 hours and 19 minutes. The principal rise is met with during the first seven miles, when an altitude of 700 feet has to be surmounted. There is said to be a slight advantage in making the journey from Launceston instead of from Hobart.

LAUNCESTON.

The town of Launceston, the second city of Tasmania, is situated on both banks of the River Tamar (formed by the junction of the north and south Esk), about 42 miles from the sea, in latitude $41^{\circ} 30'$ S. and longitude $147^{\circ} 14'$ E. It is a commercial centre of considerable importance, and although direct communication with Hobart is somewhat more favored by Australian shippers now than it was formerly, a large shipping trade is still done, the Tamar being navigable for vessels of 4,000 tons.

The area of Launceston is 3,340 acres, and within the municipality are about 50 miles of roads and streets. The population of town and suburbs was 21,606 according to the last census (Dec. 31th 1903). In municipal government, Launceston, which was incorporated in 1885, is controlled on similar lines to Hobart. Public swimming and Turkish baths have been instituted; the town is lit by electricity (120 arc lamps and 300 street incandescent lamps), while from the same installation the citizens are supplied with lighting power. The water supply of the town is drawn from St. Patrick's River and Distillery Creek, the length of the aqueduct and mains aggregating $23\frac{1}{2}$ miles, while the storage reservoir has a capacity of 1,050,000 gallons.

Arrival. The interstate steamers all run up the Tamar to the city wharves, distant no more than a quarter of a mile from the Post Office, while if the visitor arrives by train, he finds himself at Invermay Road on the north bank of the North Esk. There is no difficulty in obtaining a cab at the railway station.

Accommodation. Hotels and boarding houses are numerous, the charges being similar, and if anything, cheaper than those obtaining in Hobart. The best hotel in the city is considered to be the "Brisbane Hotel", 10/— per day. Among others are: "The Metropole", from 6/— per day; the "International Coffee Palace" from 4/6 per day, and the "Central Hotel", 6/— per day. Visitors who contemplate a

longer stay, will probably prefer a country resort, of which there is a great choice, the charges ranging from 5/— to 8/— per day, and 20/— to 50/— per week at the hotels, and from 20/— to 35/— at boarding houses.

Cab Fares. By distance 1/— per mile. After the first mile 6 d. per half mile. By time 1/6 for an engagement not exceeding half an hour. Up to three quarters of an hour 3/—. Not exceeding one hour, 4/—. Hiring, unless by arrangement to the contrary, is by time.

Public Buildings. The Launceston Town Hall, situated at the corner of St. John and Cameron Streets, and used almost entirely for municipal purposes, is an ornamental stuccoed building with a recessed Grecian portico. The Government Buildings in St. John Street are also above the average order, though built at different times, and in widely different styles. The Custom House is to be found on the Esplanade, nearly opposite the berth of the interstate steamers. A handsome fire brigade station and tower are situated in Brisbane Street. The Post and Telegraph Offices in the Queen Ann style of architecture, were erected at a cost of £20,000.

Banks. Commercial Bank of Tasmania; National Bank of Tasmania (Head Office St. John Street); Bank of Australasia; Union Bank of Australia; The Launceston Savings Bank, and the Post Office Savings Bank.

Churches. Anglican:— "St. John's" (St. John Street); "Trinity" (corner of George and Cameron Streets); "St. Aidan's" (Abbott Street); Roman Catholic:— "Church of the Apostles", Margaret Street; "St. Fin Barr's" Church, Inveresk. Presbyterian:— "St. Andrew's", Elplin Road; Chalmers Church, Peel Street; Several Methodist and Wesleyan Churches in Patterson and Margaret Streets, Congregational in Tamar Street, and Christ Church, Princes Square; Baptist, York Street; Tabernacle, Cimitiere Street; Salvation Army Barracks, Brisbane Street.

Hospitals and Charitable Institutions. The General Hospital is an extensive and commanding pile of buildings situated on a slight eminence in Upper Charles Street. It has accommodation for 134 patients. The building cost £25,000. There is also an invalid depot for males and females in Patterson Street located in what were formerly the Military Barracks with a considerable area of ground round them. The Launceston Girls' Industrial School, pleasantly situated on the Wellington Road, has done a

large amount of good. There are also maternity and homeopathic hospitals.

Press. There are two daily papers in Launceston:—the "Daily Telegraph" and the "Launceston Examiner". The "Courier", "Monitor" (a Roman Catholic journal) and the "Sporting News" are issued weekly.

The Corporation Baths, situated in Patterson Street west, are of the most modern design. Besides a large swimming basin there are hot and cold plunges and a well equipped Turkish bath. The baths are open daily and very extensively used.

PLACES OF INTEREST AND AMUSEMENT.

• **Theatres, Halls etc.** The Albert Hall in the City Park in Tamar Street is municipally owned and is capable of seating 2,000 persons, and has splendid acoustic properties. The Academy of Music in George Street is a comfortably arranged theatre, capable of holding 1,000 persons, and a hall suitable for festive gatherings is attached to the Mechanics Institute.

The Victoria Museum and Art Gallery, in Wellington Street between Cameron and Patterson Streets, was erected in commemoration of the Jubilee of Queen Victoria. The Museum is on the ground floor and contains many specimens of both general and scientific interest, among which a fine collection of the economic ores of the State, may be mentioned. A room for the use of tourists with guide books, maps and general information will be found in this building. The Art Gallery is on the upper floor, and besides the permanent collection is enriched by loans from other quarters at different times. The building, which is lighted with electricity, is open to the public every Thursday evening from 7 to 9, as well as from 10 a. m. to 5 p. m. on week days, and from 2 to 4 p. m. on Sundays.

Libraries etc. Part of the Town Hall is set aside for use as a Public Library, containing about 13,000 volumes, which is open to the public every day from 10 a. m. to 9.30 p. m. and on Sundays from 2 to 6 p. m. Mr. Andrew Carnegie, the American Millionaire, donated the sum of £ 7,500 for the erection of new library buildings. A Mechanics Institute and Public Library is situated in Cameron Street, containing 23,000 volumes with a public reading room attached. The rates of subscription are very moderate. The

library is open from 11 a. m. to 9 p. m. and the reading room from 9 a. m. to 10 p. m.

Clubs etc. The Launceston, Brisbane Street; Northern Club, Cameron Street; Commercial Travellers', Cameron Street; Anglers Association; Camera Club; Gun Club; Northern Tourists Association, and other sporting associations.

Parks and Gardens. Launceston has been called the "City of Gardens", and a great part of its large acreage has been devoted to these very necessary breathing spaces of the city; such reserves under municipal control are:—Invermay Park, 33 acres; City Park, 12 acres; Princes Square, 3 acres; Victoria Square, 14 acres; St. George's Square, 3 acres; Albert Square $3\frac{1}{2}$ acres; Wellington Square, $1\frac{1}{2}$ acres; and the Cataract Hill Reserve. In the City Park are the buildings of the Tasmanian Exhibition which was opened in 1891. All the reserves are well laid out and the residents as well as the visitors take full advantage of the opportunities offering in this direction.

PLEASURE RESORTS.

Though not so numerous as those of Hobart, the points of interest for which Launceston serves as a centre will warrant the few days spent in observing them. And especially in the immediate neighbourhood of the city there are numerous places of interest, which can be reached with little trouble.

Windmill Hill. An excellent panorama meets the eye at the top of Windmill Hill, which is reached along Tamar Street or High Street, including not only the city itself, but also the surrounding country. The reserve on the top of the hill is called Victoria Square, and is well provided with seats. Other fine views are obtained from Laurence Vale and Cataract Gorge.

Cataract Gorge. The Cataract Gorge is a favorite and picturesque resort close to the city. The two rivers whose confluence forms the Tamar, flow through totally dissimilar country; the North Esk through level plains of closely settled fertile land, the South Esk in a series of cataracts through rock bound gorges of which Cataract Gorge, near the town itself, is one of the finest. It is a narrow cleft in a precipitous, basaltic range spanned on the side nearest the town by a graceful iron bridge. Above the

bridge, the water is clear for half a mile, after which the cataracts begin, divided from each other by pools or basins at irregular intervals. A winding track known as the Zig-zag, and one of the most picturesque walks imaginable, has been cut just above the surface of the river along the north side of the gorge. The whole length has been planted with tree ferns, wherever possible banks have been formed and grassed, and the way from entrance to the first basin is one of continual beauty, natural on the one hand and artificial on the other.

The Cataract Gorge may be reached on foot (a few minutes' walk) across the South Esk Bridge, where gates open the way to the rustic path on the side of the gorge.

Electric Power House. From the first basin a path leads to where the water is diverted into a tunnel through the hill to the Power House. The water during the passage has a fall of about 100 feet, equal to about 1,460 horse power. The generative station may be inspected. Orders for admission are obtainable at the Town Hall.

Campbell's Potteries. A pleasant walk or drive (bus 3d.) may be taken to the "Sandhills" where these potteries are situated. A fine view of the city is obtainable from here.

The Zoological Garden is contained in the City Park, a fine reserve of about twelve acres in area planted with shady trees. The collection of animals is a small one, and chiefly confined to Tasmanian specimens.

The Albert Hall, a fine building at the entrance to the park, was erected in connection with the Launceston Exhibition in 1891.

The Racecourse is at Mowbray, about two miles from the city.

Beaconsfield. The mining town of Beaconsfield lies only about 28 miles from Launceston, the most enjoyable route thereto being by steamer down the Tamar to Beauty Point (two miles from Beaconsfield by road) where a vehicle connects with the steamer. Six miles from Beaconsfield is the site of the first settlement in 1804, but very few vestiges of it now remain. Another pleasant excursion is to the Flowery Gully Caves, six miles south-west of Beaconsfield which approach in beauty the famed Jenolan Caves of New South Wales.

Deloraine. Nowhere in Tasmania is there a more English appearance than in the older settled municipalities of Evandale, Longford and Westbury. Well kept farms and good roads are the rule. There are a dozen routes to select from, and at the terminal townships there is always a good lunch procurable. A general idea of this part of the State can be obtained by a train journey to Deloraine along the western line returning the same afternoon. Return fare 10/6. From Deloraine, the Chudleigh Caves are to be visited, cheap railway excursions thereto from Launceston having been initiated.

Cora Lynn. During the summer season cheap excursions are made to Cora Lynn one of the beauty spots of the State, which also affords the objective of a pleasant day's driving (vehicle 20/— per day).

NEW ZEALAND.

AREA AND BOUNDARIES.

Though to most people New Zealand means the three islands in the Tasman Sea surrounded on all sides by the Pacific Ocean, the area and boundaries of the Colony are in reality far more extensive. In 1887, the Kermadec Islands, lying between 29° and 32° south latitude and 177° and 180° west longitude were added to New Zealand, and by a proclamation dated 11th June 1901, the Cook Islands or Hervey Group, over which a British protectorate had formerly been exercised, were also included in the lands over which the Government held administrative authority. The principal islands of this South Pacific Group are Rarotonga, Mangaia, Atiu, Aitutaki, Mitiaro, Mauke, the Herveys, Palmerston, Savage Island (Niue), Pukapuka, Rakaanga Manahiki, Penrhyn and Suvarrow. Officially therefore the boundaries of New Zealand are somewhat complicated. New Zealand itself and its nearer dependencies lie between 33° and 53° south lat. and $166^{\circ} 30'$ east and 173° west long.

To include the Hervey Group, the boundaries were extended to take in all the islands between 8° and 23° south lat. and 17° and 156° west long., including the Catham Islands, the Auckland Islands, Campbell and Bounty Islands, and many others which are dependent.

The area of the Colony of New Zealand is estimated at 104,751 square miles. The North Island has a length of 575 miles, a breadth of about 250 miles, a coast line of 2,200 miles and an area of 44,468 square miles. The South Island is 525 miles long, 180 miles broad, while its area is 58,525 square miles and its coast line 2,000 miles; the conformation being much more regular than the North Island. What is commonly known as the South Island is officially called Middle Island or New Munster, while Stewart Island is named South Island or New Leinster. It has an area of 665 square miles, its length and breadth being 30 miles and 25 miles respectively.

The remaining islands belonging to New Zealand are all small and comparatively unimportant. The nearest points between Australia and New Zealand are Sugarloaf Point in New South Wales, and Cape Maria Van Diemen in the North Island, the distance between them being 1,100 miles.

PHYSICAL FEATURES.

The dominant characteristic of New Zealand is its mountain system. Both the North and South Islands are volcanic in their origin, and both still exhibit signs of igneous activity, though in the South Island this is confined to earthquakes and thermal springs. The backbone of the land is a longitudinal mountainous chain running in the direction of S. W. to N. E. from the East Cape in the North Island to South Cape at the extremity of Stewart Island. This range is of course interrupted by Cook and Foveaux Straits, but otherwise is continuous. It consists of upheaved and stratified rocks.

The real volcanic country is found in the North Island, stretching from Lake Taupo to the Bay of Plenty. Almost in the centre of the North Island and on the south-westerly shores of Lake Taupo are the active volcanos Tongariro and Ruapehu, which attain elevations of 7,515 and 9,008 feet respectively, while further north, in the midst of thermal activity, is Mount Tarawera which, in 1886, broke out into a terrific eruption, destroying those marvellous natural beauties, the Pink and White Terraces. The eruption which took place on the tenth of June, only lasted a few hours, changing in that short space of time the whole aspect of the country.

After a few preliminary earthquake shocks, Mount Tarawera, previously believed to be extinct, broke out into violent explosions, hurling ashes, dust and red hot stones to an immense height. The waters of Lake Rotomahana and its clay bed were blown bodily into the air as a mud cloud which fell on the Pink and White Terraces and totally obliterated them, while at the same time it covered the surrounding country, in some cases to a depth of thirty feet. Three native villages were totally destroyed and 104 lives were lost. In September 1888 there was another outburst of volcanic activity which affected a portion of the North Island and also, by reason of the accompanying earthquake, the whole of the South Island; the town of Christchurch suffering severe injuries to its buildings.

During 1901 there was an important thermal outbreak, a great geyser having broken out on the site of the Pink and White Terraces, and the hope was expressed that the natural sluicing operations would restore that famous locality; but so far it has not been realised. A remarkable crater lake marks the summit of the peak of Ruapehu which is subject to slight and intermittent eruptions, ejecting vast columns of steam. During such an outbreak which took

place in 1895, new hot springs formed on the margin of the lake, while the heat of the lake itself increased.

Although not the highest mountain in the North Island, Mount Egmont (8,300 feet) is in many respects one of the most remarkable. From a base with a circumference of thirty miles, which stands in one of the most fertile districts of New Zealand, it rises in an almost perfect cone to a snow clad summit, resembling closely the Fujijama of Japan. The great range in the South Island are the Southern Alps, presenting all the characteristics of its Swiss prototype, and even surpassing it in grandeur and variety of scenery. The snow line being so much lower in New Zealand than in Central Europe, many of its peaks rise above the line of perpetual snow. There are larger and longer glaciers than are to be found in the European Alps, and the enthusiastic climber will find even greater difficulties to surmount than face him in Switzerland. Few of the New Zealand Mountains have as yet been scaled, and many of the peaks and most of the glaciers are still unnamed, and there still remains a considerable field open to the adventurous explorer.

Towards the southern end of South Island the land becomes very broken and ranges branch out, practically in all directions. Among the conspicuous peaks in the South Island are besides Mount Cook or Aorangi, the loftiest peak in the South Island (12,349 feet); Mount Earnslaw at Lake Wakatipu (9,125 feet), a typical glacier Mountain; Mount Aspiring at Lake Wanaka (9,949 feet); Mount Arthur (8,000 feet); Mount Tretoko (8,000 feet); Double Cone (7,688 feet); Mount Bathams (6,600 feet) and other magnificent peaks.

But although New Zealand is mountainous, there are plains of considerable extent interspersed throughout the Colony. Chief among these are the Canterbury Plains, a most fertile tract of country in the South Island extending from the eastern seaboard to the foot of the Southern Alps. In the northern portion of the South Island are several small alluvial valleys and plains of which the Wairau Plain is the largest. In the North Island the principal stretches of plains or comparatively level country are Hawkes Bay on the east coast, the Wairarapa Plain in the Wellington District, and a strip of country of about 250 miles in length on the south-west coast.

The largest lake in the Colony is Lake Taupo, in the centre of the North Island. It has a length of 25 miles, and a width of 17 miles, with an area of 241 square miles. Other lakes in the North Island are Lakes Rotorua and Tarawera and others in the thermal district, and the beautiful lake Waikaremoana in Hawkes Bay.

The largest lake in the South Island is Te Anau with an area of 132 square miles, while Lake Wakatipu, the second in size, has an area of 114 square miles. Other lakes in the same island are Lakes Manapouri, Wanaka, Hawea, Ohau, Pukaki, Tekapo, Hauroto, Monowai and others.

From Lake Wanaka flows the greater portion of the head waters of the Clutha, the largest river not only in the South Island but in the whole of New Zealand. It and its numerous tributaries drain a considerable area of country, flowing at last into the sea at Molyneux Bay on the East Coast. The Clutha is however only navigable for boats and small steamers for a distance of about 30 miles. The South Island is well watered throughout, the snow and glaciers of the Southern Alps feeding a large number of streams. On the western side of the range are mostly mountain torrents, of which the Buller, Grey and Hokitika Rivers are navigable for a short distance from their mouths. Others flow through or down the rocky gorges of the Southern Alps into the grandeur of the western fiords. In the North Island are the Waikato (170 miles), which is navigable for small steamers for about 100 miles from its mouth, entering the sea to the southward of Manukau Harbor; the Thames emptying itself into the Gulf of Hauraki; the picturesque Wanganui (120 miles), discharging into the South Taranaki Bight, and numerous others of lesser importance.

The principal bights of New Zealand are:— North Island:— Raungaunu Bay, Doubtless Bay, Bay of Islands, Hauraki Gulf, Bay of Plenty and Hawkes Bay on the east; Kaipara Harbour, Manukau Harbour, Whangoroa Harbour, Kawhia Harbour, North and South Taranaki Bights, and Port Nicholson on the West Coast. In the South Island:— Massacre or Golden Bay and Tasman Bay on the north; Cloudy Bay, Pegasus Bay, Akaroa Harbour, Port Lyttelton, Canterbury Bight and Otago Harbour on the east; Bluff Harbour and Preservation Inlet on the south; Jackson Bay, Buller Bay and Karamea Bight on the west coast, besides numerous sounds or fiords on the south west coast.

The chief capes are:— North Island — Cape Maria, Van Diemen and North Cape on the north; Capes Brett, Colville, Runaway, East Cape, Capes Portland, Kidnappers, Turnagain on the east; Cape Palliser and Surclan Head on the south; Cape Egmont, North Sand Head and Reef Point on the west. South Island, Cape Farewell on the north, Cape Campbell, East Head and Cape Saunders on the east; the Bluff and Sandhill Point on the south; Cape Providence, Cascade Point and Cape Foulwind on the west coast.

HAULING KAURI LOGS, WAIROA
NEW ZEALAND

Besides the Cook, Catham and other groups comparatively distant from New Zealand, but politically belonging to it, the coastal waters of the Colony contain a number of islands, which however are mostly more or less barren and inhospitable. Near the North Island are the Three Kings, the scene of more than one shipwreck, The Hen and Chickens, Great and Little Barrier Islands at the entrance to Hauraki Gulf on which Auckland is situated, and numerous others all on the east coast. On the north coast of the South Island (officially known as Middle Island) are D'Urville and smaller Islands. To the south lies Stewart Island, besides a few smaller ones on the south and on the south west coast.

CLIMATE AND RAINFALL.

Speaking generally the climate of New Zealand is more temperate than that of Australia, and approaches more closely to that of European countries. In some respects it partakes of the characteristics of Tasmania, but as it extends over 10 degrees of latitude, the range in temperature is greater and the atmospheric changes are more varied. The climate of the North Island has been likened to that of Northern Italy, while comparisons have been drawn between the South Island and the Channel Islands.

The mean annual temperature of the North Island is 57° , of the South Island 52° , and for the whole Colony the average range is Spring 55° , Summer 65° , Autumn 57° and Winter 48° .

Snow rarely remains on the ground at sea level in the North Island, but in winter time ice is found in all parts of the Colony.

Entirely surrounded as it is by the stormy waters of the South Pacific Ocean, New Zealand is subjected to strong winds and gales, and the meteorological conditions are humid, drought is almost unknown, and it is seldom that any station reports no rain for even a month at a time. The average rainfall varies from about 40 inches per annum in Auckland to 60 inches at New Plymouth (both on the North Island), and rises as high as 134 inches yearly on the west coast of the South Island.

FAUNA AND FLORA.

New Zealand is singularly deficient in land mammals indigenous to the soil, and the list comprises only a rat, two species of the bat, and a native dog, the last named probably introduced by the Maoris when they first settled

in "Ao-Tea-Roa". Even the rat most likely came ashore first from the ship of some early explorer, so that all the mammals which can confidently be said to be aboriginal are two small bats. Captain Cook landed some pigs from his ship, and these provided the Maoris with flesh food until the settlement of the Colony brought in its train all the domestic live stock. There are only a few species of lizards and no snakes, while none of the marsupials of Australia exist in New Zealand. About 133 birds are peculiar to the Colony, of which over 70 are land birds. The former existence of gigantic birds is one of the most interesting and remarkable ornithic features of New Zealand. In the earlier but still historical times (for the Maoris have legends about it, and eggs as well as feathers have been found at different times), the gigantic Moa (*Dirornis*) inhabited the island. Being easily captured, it is probable that it supplied the Maoris with the much needed flesh food, and thus soon became extinct. Of this wonderful bird which was destitute of wings there were about 12 species, and some specimens must have stood twelve feet high. Skeletons attaining nearly that height can be seen at the various museums. Other extinct birds were the *Napagornis* and the *Cnemiornis*, a gigantic goose. The *Apteryx* or Kiwi, another flightless bird, of which there are five or six species, is still to be found in the wilder regions, and the *Notornis* or Takahe seems also to have let its wingpower lapse for want of use. There are several other varieties with a similar lack of wings such as the Kakapo, a ground parrot, which looks like an owl and cannot fly, and the Weka (*Ocydromus*) a large land rail or wood hen. The Huia (*Heteralocha acutirostris*), whose feathers are worn by the Maori Rangatiras, are only found in the North Island.

A most interesting study in evolution or perhaps degeneracy is afforded by the Kea (*Nestor Notabilis*), which before the advent of the Europeans was a fruit eating parrot, but when the sheep began to spread over the plains this bird developed a fondness for the kidney fat of lambs, and now works great havoc among flocks by settling down on the back of a sheep tearing wool and skin and flesh away with its strong beak and devouring only the kidneys. The Kea is only found in the Alpine regions of the South Island, while the Kaka (*Nestor meridionalis*), a reddish brown parrot, is to be met with in both islands. Among other birds are several species of wild ducks, teal, black swan, hawks and pigeons, indigenous to the country, while European pheasants, partridges, quail and grouse have been introduced.

The coastal waters team with fish, some of which, such as the blue cod, butter fish, schnapper, king fish, frost fish are of delicious flavor, and salmon, trout, perch, tench and carp have been successfully acclimatised and afford excellent sport to the angler.

The Flora of New Zealand is extensive, and the islands are, or were before the days of settlement, covered with vegetation. Two thirds of the species found are entirely confined to the group. In all there are about 120 indigenous forest trees, comprising a large quantity of woods valuable for building purposes or cabinet making; such are the well known Kauri Gum, the Puriri, the Matai or black pine, the Rimu or red pine, Kahikatea or white pine, the Totara, a species of yew, the Hinau, Mapu, Rata and various species of beech. The fern tree, which is represented by about 130 species, grows in great variety, and in almost endless profusion. Although much of the soil is barren, producing only a rank and scanty vegetation, as is the case, for instance in the interior of the North Island, there are large tracts of country covered with most nutritious indigenous grasses. Other specimens of vegetation are the wild flax or hemp (*Phormium tenax*) commercially known as phormium, the Toitoi, and the Rampo which have many uses, and may some day be used for paper making.

A curious growth is the Awhalo, a fungus, parasitic on a caterpillar (*Eordiceps robertsii*), which it kills by growing out of its head. The growth is commonly known as the vegetable caterpillar.

POPULATION AND VITAL STATISTICS.

The density of population in New Zealand is greater than in any of the other Austalian Colonies with the single exception of Victoria, the latter at the close of 1903 having 13.76 persons to the square mile, while in New Zealand the figures were 7.97 to the square mile. Over three quarters of a million people have been added to the population in the last sixty years, the greatest influx taking place in the period from 1841 to 1871. Since 1890 the increase, though steady, has not been so startling, the addition coming mainly from the increase of births over deaths, and the movement of population between the colonies of the Australian group. Oversea immigration is maintained at about the same level from year to year, but the length of the voyage and the cost of the passage acts as a deterrent to a very large number of those who have decided on emigration from the old world.

In the distribution of the population a satisfactory feature is the fact that the centralisation into urban districts, so marked a feature of the Commonwealth States, and indeed of all the chief countries of the world, is not so noticeable in New Zealand, and moreover the number of small towns is proportionately greater. Four towns — Auckland, Christchurch, Wellington, and Dunedin have over fifty thousand inhabitants each, and some others range from four thousand to nine thousand. But counting all these, the proportion of urban residents is only about 36 per cent, whereas Melbourne alone, without reckoning other towns in the State has within its boundaries more than 41 per cent of the States population, while Adelaide has nearly 46 per cent, so that New Zealand comes exceedingly well out of the comparison, and the rural population, generally considered the backbone of a young country, is in the majority. The reason of course lies in the fact that New Zealand being insular, is easily accessible in practically all parts of both islands, and those searching for land are more inclined to settle down at a distance from the city centres because they know that reaching them is a comparatively easy and inexpensive matter.

At the Census held on December 31st 1903, the population of New Zealand, exclusive of Maoris, numbered 832,805, showing a considerable increase since March 1801, when the number was 772,719 (405,992 males and 366,727 females). In that year the birth places of the inhabitants was given as follows:—

Born in New Zealand	516,106
- - Australia	27,053
- - United Kingdom	205,111
- - Other British possessions	4,222
- - German Empire	4,217
- - Austria	1,874
- - Denmark	2,120
- - Sweden and Norway	2,827
- - United States of America	1,617
- - Chinese Empire	2,902
- - Other countries etc.	4,616
	<hr/>
	772,719

Judging by death rates, New Zealand is the healthiest colony of the Australasian group. Its death rate is 9.86 per thousand (males 10.78, and females 8.71), being lower for both sexes than any of the Commonwealth States. The rate is much below that for any European country, and is still

steadily declining. Constitutional diseases (phthisis and cancer are the chief causes of death, the average of tubercular affections being considerably increased by the fact that the Maoris are particularly susceptible to them).

Specific febrile and zymotic diseases, diseases of the circulatory, respiratory and nervous systems also account for a large number of deaths per annum.

Of the 772,719 persons (exclusive of Maoris) which comprised the population of New Zealand in 1901, 2857 were Chinese, and 2407 half-castes living as Europeans. At the same time the number of Maoris in New Zealand was found to be 43,143 persons including 3,133 half-castes living as Maoris. The total population of the Colony in that year was therefore 815,862.

THE MAORIS.

In the strict sense of the word, New Zealand had no aborigines, and her first "colonists", so to speak, were a race that for a savage one, was highly cultured in the ethnological sense, before it reached the shores of the vacant land in the southern seas. From the time in the early geological ages when it first took shape above the ocean, New Zealand appears to have been uninhabited, given over to the few wild birds and animals that evolved within its borders, or arrived across the expanse of salt water which separated it from the nearest land, and to the anthropologist it has appeared that no palaeolithic or neolithic race ever found a footing there, at least no human being in the same grade of evolution as say the Tasmanian or Patagonian has left any trace of his occupation. There are evidences that before the Maoris came there were already in possession the Morioris, the last remnant of whom are now to be found in the Chatham Islands, but these were but an earlier offshoot from the same Polynesian stock who had merely forestalled their later brethern in the settlement of the islands, and had been driven out by the force of superior numbers.

Tradition says that originally the Maoris dwelt in a country named Hawaiki, and that one of their chiefs, named Kupe or Ngahue after returning from a long and adventurous voyage during which he discovered the North Island of New Zealand, persuaded his kinsfolk and followers, who were harrassed by war, to set out with a fleet of canoes for

that marvellous southern land, which they called Ao-Tea-Roa — "the long white cloud".

It is possible to fix an approximate date of their arrival, both from the traditions of the Maoris, and from a comparison of the genealogical sticks kept by the Tohungas, or priests. Both indicate that about twenty one generations, or about five hundred and twenty five years have passed since that migration, which would place the date of their arrival in New Zealand in the latter portion of the fourteenth century.

The names of most of the principal canoes, and the doings of the people on arrival in the country of their adoption, are still remembered, and the different tribes have been traced from these traditions.

It would be easy to fill pages with the poetical stories of this first occupation, as conceived by the Maoris and sung to generation after generation of their children. Sir George Grey and others have collected many of these legends, and if only as emphasising the imaginative side of the Maori character, they make fascinating reading.

The Maori, though now spoilt from the ethnological point of view by the civilisation of the European, affords a most interesting anthropological study. As a branch of the great Polynesian race, their characteristics are in the general aspects similar to that nation. Brown skinned, heavily built, tall, often six feet or over; nose short and broad, forehead high and sloping; lank hair and scanty beard; mouth coarse; such are some of the epithets which apply to the tribe. In their native habiliments the Maoris look natural and dignified; in the garments of the white man, which they now mostly affect, their appearance is somewhat squat and vulgar, and frequently ludicrous on account of their eccentric taste in dress. Their speech is singularly musical, like most Polynesian languages, but with something of a wail in it. Formerly they tattooed their faces and bodies in a most elaborate manner, but now face tattooing is becoming rarer and confined to women.

The Maoris possessed a considerable fund of common sense and wit; and they were always quick to see through shams and detect insincerity. They were proud, vain, arrogant and boastful, yet chivalrous, polite and amenable to reason. Their virtues were bravery, dignity of manner, courtesy, hospitality, command of temper; their vices were those of a tropical people, indolence, cruelty, want of cleanliness and sensuality. War was the occupation and pastime of the Maoris, they loved it for its own sake and conducted it according to their rights in the most



"HONGI",
MAORI SALUTATION.

chivalrous manner. Their weapons, until muskets became the fashion, were chiefly spears, greenstone "meres" and clubs. For attacks by sea they had their famous war canoes, often more than eighty feet long and manned by a hundred warriors. On land their military skill was evidenced by their strategy, and by the manner in which they built "Pas" and stockades, some of which excite the admiration of engineers to the present day.

In its pristine state the polity of the Maori was patriarchal, and from the first they were divided into nations and tribes, each with its well defined classes. At the head was the Ariki or priest and chief, and then came the Tana or royal family, the Rangitira or nobles, the Tutua or middle classes, the Ware or lower classes, and the Tourahareka or slaves. The chiefs, though aristocratic, were not autocratic, and in important public questions such as the declaration of peace or war, every freeman had the right of expressing his opinion.

The tribe was of a communal character, organised alike for peace and war, there was no individual ownership in land which was regarded as the property of the tribe and could not be sold without its consent. They were socialistic in their desires and aspirations. The accumulation of wealth in any shape or form was quite foreign to them, and it was deemed a disgrace to possess riches, except for the purpose of squandering them. In time of peace the tribes were occupied in fishing, tilling the soil, making weapons and mats. The principal articles of food were fish, fern root, kumeras, taros, dogs and various berries, with an occasional cannibal orgy on the bodies of slaughtered warriors. The living huts (wares), though more advanced than those of the Australian blacks, were evil smelling and indescribably dirty; usually they were made of grass or rushes lashed to a wooden framework, portions of which were often elaborately carved. In front there was commonly a small verandah made of reeds and slabs. In the Arcadian times life was not severe, and sports and pastimes of which the natives were, and are passionately fond, occupied much of their time. Singing and oratory, wrestling, swimming, racing, and throwing the spear were practised, and the warrior in consequence was always an athlete. Some of the Maori customs, though now obscured, were highly interesting. Such were "Tapu", the Maori decalogue, a mixture based on a combination of religion and custom. Under it certain things were always sacred, while others could have that attribute temporarily conferred upon them. Muru (lit.-plunder), was a still more singular custom under

which certain offences were punished by raiding the offender who was supposed to regard his punishment as a compliment, generally he was informed beforehand and prepared a feast for his tormentors.

But the most fascinating aspects in the study of the Maori are the literature and art, to neither of which can anything like adequate justice be done in the present summarised review. It is perhaps rather stretching tenure to speak of the literature of a nation which can boast of only oral tradition in this connection, but so much of their religion and legends have been translated by investigators like Sir George Grey (whose "Polynesian Mythology" still remains a standard work), that the literature may really be said to exist though not the written language. The mythology will be found instinct with poetry. They believed in a future life, but made no mention of the resurrection of the body, and there were no punishments in these other worlds. Legends of the origin of gods and demigods were transmitted with the utmost care from generation to generation, and classes for this purpose were held by every tribe. At these classes the pupils learnt not only the history of the tribe and its religion, but received instruction in the rules of tapu, in the treatment of diseases, in agriculture, and all useful arts. Some of their love stories and fables are graceful and imaginative to a degree, a poetic instinct enabling the native to find expression for his thoughts in the sights and sounds of nature. Among the Maoris of fifty or a hundred years ago were undoubtedly great masters in the arts of decoration and carving, the elaborate designs still to be examined on door lintels, canoe prows and paddles, on weapons and utensils standing evidence of this, without taking into account the grotesquely beautiful tattooed curves and spirals with which at one time they delighted to ornament themselves. To any one seeking further information on this latter subject, Mr. Hamilton's book on "Maori Art", a most thorough and sympathetic examination of the subject, can be recommended.

LANGUAGE.

The Maoris being a Polynesian people, their language is closely allied to the dialects of the Southern Pacific, and is partly understood by natives of the Tongan, Samoan, Tahiti and other Polynesian Groups. English is however universally spoken, and it is unnecessary for the traveller to learn the native idiom.

HISTORY.

Setting aside for the time being the story of the occupation of New Zealand, or "Ao-Tea-Roa", by the Maoris, some five hundred years ago, it may be said that the history of New Zealand begins, as does that of Australia, with its discovery by Captain Cook, who circumnavigated the islands in 1769, and besides coming into contact with the natives on several occasions, charted its coasts so thoroughly and well that his maps remained in use for very many years as guides for the mariners who sought its shores. Before him there had been others to claim its discovery; the French say de Gonnevillle touched there in 1504, while the Spanish assert that in 1576 Juan Fernandez described its brown skinned inhabitants. But these are only surmises. The first really authentic account of the discovery of New Zealand is that given by Tasman, who during his wonderful voyage in 1642, besides discovering Tasmania, sighted the west coast of the South Island, which he called Staaten Land, believing it to be part of a great polar continent discovered some years before by Shouten and Le Maire. The name was afterwards changed to New Zealand on account of a fancied likeness to a province of Holland to which it bears not the least resemblance. But Tasman's voyage did little more than make known the fact that the island existed, and the European ship which according to Maori legend visited the North Island in 1740, did nothing, for the very excellent reason that the vessel was plundered and the entire crew killed and eaten. It was otherwise with Cook, who, with the thoroughness which marked all his explorations, so investigated topographical and social conditions that his report was easily read by the British nation who just at the time of its publication were undergoing a spasm of colonising fever. At the very time that Cook was engaged upon his survey of the coasts, a French man-of-war under Captain de Gonnevillle was in the same waters, and at intervals thereafter French attention was devoted to the islands; and in 1772 Marion du Fresne, after living in accord with the natives for some weeks, was with twenty eight of his crew killed and eaten by the Maoris of the Bay of Islands.

But though Cook's reports and charts drew public attention to New Zealand, the consideration of its claims to colonisation were overshadowed by those of Australia, where the home authorities had decided to establish a convict settlement. With the foundation of New South Wales, however, visits to New Zealand became more frequent,

and by the beginning of the nineteenth century the islands had been found to be a lucrative source of trade in addition to being a very suitable location for the many whaling and sealing stations, which British and Foreign enterprise had set up in the South Seas. The first white pioneers of colonisation there, were whalers and traders of the roughest and readiest type, men whose one idea was a drinking bout on the proceeds of their labor at the trying-out stations, and who, descending almost to the level of the natives as regards their habits of life, became indeed, almost Maoris in everything but color. It was in these days of loose living and lawlessness that Kororareka (the Russel of the present day), in the Bay of Islands, earned its unlovely reputation as the Alsatia of the South Pacific. Dealings with the natives were not always of an amicable nature, and on several occasions vessels were captured by them, and their crews killed and eaten, but these, and many other atrocities committed by the Maoris at that time, may in a great measure be ascribed to the cruelty and unfair dealings of those early traders.

In 1814, missionaries, under the leadership of the Revd. Samuel Marsden, the second chaplain of the convict settlement of New South Wales, left Sydney for the Bay of Islands, establishing the first mission station in New Zealand.

Until 1830 the progress of the missionaries was slow, handicapped as it was either by the direct hostility of the white traders who strenuously opposed anything calculated to minimise their nefarious games, or by their indirect influence upon the Maoris, who, suased by the cruel treatment they received from those traders, had a consequent suspicion and distrust of the whole European race. The unrest among the Maoris themselves was further intensified by inter-tribal conflicts, and for long periods the whole of the North Island was practically under the sanguinary rule of Maori chiefs, such as Hongi and Te Raupahara, who fed their warriors' lust for slaughter to the full.

Hongi, one of the most notable converts, was taken to England to assist in the translation of the Bible. While there he was made much of, and presented by the King with a suit of armour, while many of his admirers gave him besides other gifts guns and ammunition. On his return to Sydney he met Hinaki, a neighboring chief, who was then on a visit to Mr. Marsden, and with whose tribe a quarrel had in the meanwhile sprung up. Hongi eagerly seized this excuse to try his newly acquired weapons, and although, while in Sydney, he lived with Hinaki under the same roof, and afterwards sailed with him to New Zealand in the same

vessel, he would not listen to Hinaki's pacifying arguments. A battle was subsequently fought in which the modern weapons prevailed. Hinaki with about 1,000 of his followers, was killed, and 300 of the slain cooked and eaten on the field. Flushed with victory, he invaded the territory of other tribes and terrorised the North Island for a period of six years, when he died (in 1828) from the effect of an old bullet wound. Between 10,000 and 20,000 victims are ascribed to Hongi's various raids.

In the early twenties however, English eyes were turned more insistently towards the troubled islands in the Tasman Sea. In 1823 an act was passed by the Imperial Parliament extending the jurisdiction of New South Wales to New Zealand as far as the British Subjects there were concerned, and two years later a scheme, fostered by Lord Durham for the English colonisation of New Zealand, was before the British public. It failed in its object, but nevertheless the interest was awakened which later was to bear such excellent fruit. The tribal wars which at this time were raging with unabated vigor, culminated in 1831 with an appeal of thirteen chiefs for protection by the British Government, and in 1833 that appeal was answered in part by the appointment of a resident magistrate in the Bay of Islands. The conditions under which this Resident was appointed however were more farcial than otherwise, and the position was further aggravated by the lack of tact and adminisrative ability of the man himself. One of the most ludicrous of his schemes was the creation of a Maori Parliament, and in 1835 thirty five chiefs, calling themselves the United Tribes of New Zealand, proclaimed their independence, and petitioned the King of England to be patron and protector of their confederacy. A year before a certain Baron de Thierry, who claimed to have purchased 40,000 acres, announced himself the sovereign chief of New Zealand and defender of its liberties. It was at the time thought that France was at his back, and to obviate any pretensions of that nation, more encouragement was given to colonisation schemes in England. Lord Durham revised his New Zealand Association, and in 1837, in conjunction with Edward Gibbon Wakefield, took the first steps that later were to prove the means of forming a strong colonisation company. Wakefield's scheme was one which captivated the political faddists of the day, and though in high places his efforts met with rebuff, his eloquence so appealed to private individuals, that on the 12th May 1839, without the sanction of the British Government, the ship "Tory", with Colonel Wakefield and other agents of the Company on board, sailed from

Plymouth. When the ship's destination became known it occasioned a great stir in official circles, and all haste was made to forestall the Company. Letters patent under great seal were issued extending the boundaries of New South Wales to include any part of New Zealand which might be taken under the sovereignty of the Queen, and appointing Captain James Hobson Lieutenant Governor, with instructions to treat with the natives for the recognition of that sovereignty over the whole or any part of these islands.

The "Tory" arrived first, and at Port Nicholson Colonel Wakefield began his purchases of land from the Maoris, meanwhile the friends of the Company were "booming" it at home, and several shiploads of emigrants, mostly English and Scotch, were already on their way to take up these newly acquired lands. The purchases of the period under review were not remarkable for their legality, and Wakefield vied with Sydney speculators in buying up all the land they could, without much regard for the question as to who were the rightful owners. In January 1840, Captain Hobson arrived at Kororareka, and in the following month the Treaty of Waitangi was signed, by which the chiefs of the "Confederation of the United Tribes of New Zealand", and also the separate and independent chiefs ceded their rights and powers of sovereignty to the Queen of England, on the guarantee of full exclusive and undisturbed possession of their lands and estates, forests, fisheries and other properties. The chiefs yielded to Her Majesty the exclusive right of pre-emption over such lands, as the proprietors may be disposed to alienate. In consideration the Queen extended her Royal protection to the natives of New Zealand, and imparted to them the rights and privileges of British subjects.

Soon after British sovereignty had been proclaimed over the "Island of New Zealand", on the 21st of May 1840, the French Corvette "Aube" sailed into the Bay of Islands to take possession, but finding the British Flag flying there, the French Commander shaped his course for Akaroa in the South Island, with the view of founding a settlement there. His design was however frustrated by the British sloop-of-war "Britomart" which was despatched in all haste to forestall the "Aube", and succeeded in reaching the port first, and was engaged in saluting the British ensign when the "Aube" entered the harbour. This Treaty and Hobson's proclamation gave rise to the land question, which was to be such a bitter and fruitful source of contention and strife. The settlers who had already acquired land either under the aegis of the New Zealand Company or otherwise, felt that their interests had not been sufficiently guarded. Their

titles, bad as some of them were, had been abolished, and no compensating advantage had been determined on. By the end of 1840, 1,200 immigrants had arrived under the direction of the Company, and the crying need of all these people was land. That the Government could not satisfy, while at the same time it forbade the Company taking any steps so to do. The natural outcome was of course strained relations between Hobson and the official element on the one hand, and the New Zealand Company on the other. Owing to the extent of its claims and its activity in colonising, the New Zealand Company was in 1841 granted a charter "for purchasing and acquiring, settling, improvising, cultivating or otherwise dealing with, and making a profit of lands" in the Colony. A change of Government had occurred about this time in England, and the new Secretary of State for the Colonies commissioned a Mr. Spain to proceed to New Zealand and investigate the whole land question with a view to extinguishing all purely native titles. In the meantime the agents of the Company pursued their course in spite of hostile legislation, and both the North and South Islands were being settled in all directions. It was not always done in a diplomatic way however, and the seeds were at this time sown which afterwards had to be reaped as a whirlwind. Racial trouble began to arise, and Hobson found further anxiety in the attitude displayed by the Maoris in several instances, in connection mainly with land disputes.

In 1841 New Zealand was proclaimed independent of New South Wales and erected into a separate Colony, with Captain Hobson as Governor and Auckland as the seat of Government, and one of the first ordinances passed by the Legislative Council enacted that no title to land would be admitted until approved by the Government. Captain Hobson died in 1842, when bankruptcy stared the Government in the face, a position which was not improved by the weak and vacillating nature of his successor Captain Fitzroy, who assumed office in 1843. The Land Commissioners were in the midst of their labors and endeavored to bring matters into some sort of coherence. When Fitzroy arrived, he found the natives in a ferment, due to a conflict between Rauparaha and the Company's settlers at Wairau, in which the former had been victorious. Fitzroy soon proved his unfitness for his troublous post. By siding with the Maoris at a time when they were insolent with recent successes, and committing himself to a policy of blind conciliation, he undoubtedly precipitated the war with Hone Heke, a son in law of the notorious Hongi, which began

in 1844 and resulted in much slaughter both of natives and whites. Fitzroy, besides the anxiety of this war, was faced with a serious restriction in the Treasury chest, and his wild experiments in taxation only made confusion more confounded. It was a relief to all when the reins of Government were assumed by Captain George Grey, than whom no man was better fitted to deal with all the momentous questions which had arisen in the administration of New Zealand.

Governor Grey arrived in Auckland on the 14th of November 1845, and immediately set about the restoration of peaceable relations racial and fiscal alike. Courteous, sympathetic, far seeing and resolute, he was the very man for the work in hand. After cancelling some of Fitzroy's most absurd taxation proposals, and forbidding the sale of arms to the natives, Captain Grey turned his attention to the northern rebels. Hone Heke and Kawiti, the two leaders, were given a certain time to decide for peace or war, and as their replies were not satisfactory, Colonel Despard took the field against them accompanied by the Governor. After a stubborn resistance the Ruapekapeka Pa (fortress) was broken down, and as the beginning of 1846 the rebels announced their desire for peace. But the quelling of the outbreak in the north was followed by another in the Hutt Valley near Wellington.

Te Rauparaha who, despite his protestations of friendship, was suspected of instigating the raids, was taken prisoner by Captain Grey, an action which effectively restored the white man's prestige among the Maoris, and ended the rebellion.

The disturbances still continued in the Wanganui district where in 1847 an attack was made on the settlement. The method adopted for its defence was not realised by the Maoris who in February 1848 came and signified their submission. In the subsequent pacification of the natives, Grey showed himself as thoroughly understanding their character, and became very popular with them. Many stories are told of his grasp of native manners and customs, his dealing with the natives, and their esteem and admiration for Hori Grey, as he was called by them. In his dealings with the settlers however, Grey was not so fortunate, and his autocratic rule irritated the men who had depended upon a mild and easy going Governor in order to enlarge their possessions. Their chief grievance however, was that Grey was opposed to their desire for representative government. In 1846 a New Zealand Government Act was passed dividing the Colony into two provinces, and granting

HONANA MAIOHA
A MAORI CHIEF.

representative institutions. Grey however felt himself justified in refusing to put this constitution into force, on the grounds that it excluded the Maoris from representation, and that a minority would under it have power to tax the majority. So strong was the opposition that the Constitution was shelved and Grey took advantage of the powers conferred upon him to pass a Provincial Councils Ordinance by virtue of which the Colony was divided into two provinces each having an Executive and Legislative Council, both nominated by the Crown. The Governor's action in thus thwarting representative Government, produced widespread dissatisfaction, but Grey maintained his attitude uncompromisingly, and in after days his opponents were fain to admit that what they regarded as obstinacy was in reality far seeing and judicious policy.

The close of the forties was remarkable for some notable movements in the colonisation of New Zealand. Hitherto the South Island had been left practically speaking unpopulated, but in 1848 a company of Scottish emigrants, under the auspices of the Free Church, took up and settled the Otago district. It was primarily a religious settlement and ample provision was made for the practice of Presbyterianism and Wakefield's land schemes alike. Even now the Scottish element in the Otago community is most marked.

To the South Island also came the "Canterbury Pilgrims" who comprised the fine flower of English Society, and who sought in the new world all the attributes that made English country life so attractive. They did not find it, but it says much for their stamina that when their ideals were shattered they turned to as bona fide pioneers and carved out homes for themselves in the new land, more in accordance with the common rule. In 1850 the New Zealand Company brought its chequered career to a conclusion by the surrender of its charter, all its interests in the Colony reverting to the Imperial Government, and with its demise the land troubles of the Government grew gradually less.

At the close of the year 1852 the Imperial Parliament at length passed an Act conferring a representative Constitution on New Zealand in the framing of which the hand of Sir George Grey was everywhere apparent. The Constitution conferred great powers of local Government, the whole Colony being divided into six provinces, each with a Superintendent and a Provincial Council, both elective, while the government of the whole Colony was vested in the Governor and two Houses of Parliament. The Constitution was not however promulgated until January

1853, at the end of which year Sir George Grey left New Zealand. The first Session of the General Assembly was opened at Auckland in March 1854, the Provincial Councils being then already in existence. Parliamentary proceedings at first were not particularly harmonious, and an antagonism sprang up between the Central Government and the Provincial Councils, which was bitterly continued for many years. It was not until 1856 that the first Ministry under responsible Government was appointed, and after two Cabinets had been thrown out, one under Sir Stafford Bird promised some depth of stability. But the native policy of this Government was destined to have ill effects, and its efforts to conciliate the Maoris led to their discontent with the existing order. Matters came to a climax in 1860 by the commencement of hostilities against Wiremu Kingi Te Rangitake, the head of the Ngatiawa tribe in the Taranaki district, who had informed the Governor that no more land would be sold by the Maoris, and had resisted the efforts of the surveyors to map out a purchase of tribal land at Waitara which had been wrongfully sold to the Government by a minor chief.

The important Moari Pa at Puketakauere was captured after reinforcements had arrived from Australia, and in a few months 2,300 soldiers and volunteers, the latter chiefly drawn from among the settlers, whose families had been taken to New Plymouth for safety, were in the field against the Maoris. Fighting continued throughout the year with considerable losses on both sides, until in May 1861 a truce was agreed to. Negotiations were however unsuccessful, and war was on the point of breaking out again, when news was received that Sir George Grey had been reappointed Governor. His efforts towards peace stayed the outbreak for a time though the Maoris were resolute for independence.

In March 1863, troops were sent under the command of General Cameron to recapture a certain block of land belonging to the settlers at Tataraimaka, which was held by an armed body of natives, pending the restitution of their disputed land at Waitara. The Maoris accepted this as a hostile movement, and soon afterwards ambushed and killed a military detachment in the Taranaki district, and the Waikato war commenced.

The year 1864 was full of fighting, and although the natives suffered severe defeats at times, the position was often reversed. The British forces, with about 20,000 regulars and volunteers, not only vastly outnumbered their savage foe — the Maori warriors are said to have numbered less

than 2,000 — but had the further advantage in their superior armament which finally carried the day.

That the Maoris were foes of no mean calibre was shown by their heroic stand at Orakau, where a number of 300 natives under Rewi withstood the attack of 2,000 British regulars for three days, until forced by their lack of food and ammunition, they made a sortie, and the leader with about a hundred of his men succeeded in reaching the hills in safety.

The capture of the Orakau Pa in April had practically ended the Waikato campaign, and attention was turned to the Tauranga district, where the British at first suffered heavy losses during the siege of the famous Gate Pa, where the Maoris were again in the minority. Though this district was finally reduced, fighting was soon to break out in a much more serious form under the singular Hau Hau superstition. These Hau Hau rebels believed that they were bullet proof and committed many atrocious murders and gained strength. In 1865 peace was proclaimed, and there remained only the Hau Hau to deal with, which gave more or less trouble until 1870. The campaign against them was carried on both by British troops and friendly natives, and the last two years from 1868 to 1870 were rendered more sanguinary by the leadership of Te Kooti who pursued an active aggressive until his force was broken, and he himself became a hunted fugitive.

Meanwhile the Colony, despite these upheavals, had been gradually growing in importance, and although the disturbed state of some of the country districts retarded development, and changes of Ministry had been too frequent during the decade from 1860 to 1870 to allow of any great legislative good to be accomplished, the Colony forged ahead.

In 1863 the first railway in New Zealand was opened in the South Island, and in 1865 a seat of Government was transferred from Auckland to Wellington. In the following year commenced the Panama steam service, which however fell through in 1869, to be succeeded in 1870 by the San Francisco Mail Service.

At the beginning of 1871 the population of the Colony numbered over half a million. The discovery of gold had brought an influx of men and money to the South Island, and in the year 1866 gold to the value of £ 2,140,000 was exported from the West Coast. Sheep and cattle breeding and agriculture also made great strides.

From 1870 to 1880 a still more striking change in New Zealand history was entered upon. When the decade opened New Zealand was a federation of nine small pro-

vincial settlements with a population of a quarter of a million, a public debt of seven million, 700 miles of telegraphs, and 46 miles of railway, when it closed the Government had been centralised in Wellington, the population had been doubled, and the public debt trebled. There were 4,000 miles of telegraph, and 1,100 miles of railway with numerous roads and bridges in most of the settled and many of the unsettled parts of the Colony. The policy of Sir Julius Vogel, who initiated the borrowing, may have been premature and extravagant, but it certainly was a lasting good in the subsequent development of the country. The state-aided immigration scheme drew thousands of settlers, mostly of a good class, to New Zealand, and these men contributed to the occupation of the waste lands. In politics the chief feature was the return of Sir George Grey, who, since he had retired from his Vice Regal position in 1867, had taken up his residence among the people for whom he had done so much. He came back to public life to defend the Constitution which was threatened with destruction by the passage of the Abolition of Provinces Act in 1875, and though that act came into law, Grey continued in the forefront of the opposition, and in 1877 defeated the minority on a vote of want of confidence, thus breaking the tenure of the continuous ministry, which with one other interruption lasted from 1870 to 1890.

Towards the end of the seventies the Vogel boom burst, and the Colony entered upon a period of depression, caused primarily by the inflation of land values, and a fall in the prices of New Zealand commodities, especially wool and wheat. This depression continued in a varying degree of intensity right through the decade commencing with 1881, and in a financial sense the period was the worst that the Colony had ever seen. Political life was largely devoted to a series of expedients for keeping the Treasury from absolute depletion for carrying on the settlement of the land. In 1885—6 the industrial stagnation threw hundreds of artisans out of work, and John Ballance as Minister for Lands made an attempt to solve the unemployed problem by placing them on the land, and making producers out of them. Some of these village settlements prospered, others did not, but the effort made by Ballance to conquer the depression in this department of public affairs certainly had a good effect.

A new civilization was however springing up. New Zealand had passed through the days of pioneering, whaling, sealing, alluvial gold digging and mammoth pastoral enterprise, and had entered upon the commercial and industrial

period with a consequent introduction of a strong democratic element into the community. This democracy acknowledged John Ballance as their head, and by the end of 1890 was sufficiently strong to return him at the head of a majority. Since then New Zealand has been a country of experiments in the way of liberal legislation, and perhaps no colony of the Australasian group affords better opportunities for judging the successes and disadvantages attendant upon the progress of a democracy towards socialism.

A list of the Acts placed on the New Zealand Statute during the last thirteen years bears every evidence that the Government is thoroughly in favor of democratic, or one might even say socialistic principles. The lot of the worker has been their particular care, and in whatever way possible it has been ameliorated, while at the same time the general community has by no means been neglected.

The long continued period of depression definitely closed in 1895, and the Colony again started on the up grade of prosperity, in which all sections shared, and which has, during the first years of the twentieth century, made New Zealand the envied of Australia.

BIBLIOGRAPHY.

Innumerable books have been written about New Zealand, and it would be a matter of great difficulty to quote a few of them as containing absolutely the best sources of information on the different subjects.

The earliest accounts of New Zealand are to be found in "Tasman's Log", and Cook's and Crozet's accounts of their voyages, and a good idea of the early days of the Colony is gained from Thomson's "Story of New Zealand", and Swainson's "New Zealand and its Colonisation", as well as Buller's "Forty years in New Zealand", (missionary account).

Among the books concerning the native inhabitants, the following may be mentioned:—

"The Ancient History of the Maori", by J. White; "Maoris" by H. B. Vogel, and "Maori Religion and Mythology", by E. Shortland.

In Science there are the works of Hooker and Dieffenbach; Von Haast's "Geology of Canterbury and Westland". Dr. von Hochstetter's "Auckland and Nelson"; Kirk's "New Zealand Forest Flora"; Hudson's "New Zealand Entomology", and Sir Walter Buller's "Birds of New Zealand".

The colonisation of New Zealand is well described in "Life of Gibbon Wakefield", by Dr. R. Garnett, while the official "New Zealand Year Book", and Coghlan's "Australia and New Zealand", contain the principal statistics as well as general information.

"The Long White Cloud", by W. G. Reeves affords a good general insight, and is easily readable.

Detailed guide-books after the manner of Baedeker and Murray, do not exist, but the "Itinerary of Travel in New Zealand" (issued by the Government Tourist Department), and "New Zealand as a tourist and Health Resort" (issued by Thomas Cook and Son), will prove valuable.

There are also official guide books relating to the Thermal Districts, Mount Cook and the Cold Lakes District, but these are neither complete nor up to date. Bayertz's "Guide to New Zealand", and especially "New York to New Zealand", by C. W. Mc Murran, give a good general idea of the country.

CONSTITUTION.

As in the States of the Australasian Commonwealth, the constitution of New Zealand is modelled upon that of Great Britain. There is a Governor appointed by the Crown with certain Royal prerogatives, whose salary and allowances are paid by the Colony, the present enrolment being £ 5,000 per annum.

The legislature consists of two houses, the Legislative Council, and the House of Representatives. The number of members constituting the former cannot be less than ten, but the maximum is not limited. Councillors receive £ 150 per annum for their services, but a deduction of £ 1.5.0 per day is made for absence (except from unavoidable causes) exceeding five days in each session. To be qualified as members a person must be over 21, a natural born, or naturalised British subject. Since 1891 the tenure of a seat has been fixed at seven years; previous to that year it was for life.

The House of Representatives consists of seventy six European members, and four Maoris, the total being eighty in all. All the electoral districts return one member each, with the exception of the cities of Auckland, Christchurch, Wellington and Dunedin, which each return three members. Remuneration amounts to £ 240 per annum, with a deduction of £ 2 per day under the same conditions as for Councillors. Qualifications for membership provide that persons must be

of the male sex, duly registered on the electoral roll, and free of all disabilities as set out in the electoral act.

Every man and woman of the full age of twenty one, a natural born or naturalised British subject, a resident in the Colony for one year, and in an electoral district for three months, may vote at elections. Adult Maoris may vote without registration.

Since the institution of responsible Government in 1854 there have been fourteen complete Parliaments. The duration of Parliament is now limited to three years.

DEFENCE.

The defence force of New Zealand is composed of permanent regiments of artillery (Royal New Zealand Artillery), and another of engineers, (Royal New Zealand Engineers), militia, or partially paid corps, volunteers and cadets. The Royal New Zealand Artillery with an establishment of 240 rank and file are stationed at Auckland, Christchurch, Dunedin and Wellington, the last named being the headquarters. Their principal duties are the charge of all guns, ordnance, stores, ammunition and munitions of war, in the forts and other defences at these four centres. The Royal New Zealand Engineers (96 all ranks) are divided between Auckland and Wellington, and have charge of all submarine mining stores, and of two submarine mining steamers. There are five batteries of Volunteer Field Artillery with a total of 430 in all ranks, and five Garrison Artillery Corps comprising in all 50 officers and 917 rank and file. In the North Island there are two corps of Volunteers Submarine Miners, with a fairly efficient equipment, and an establishment of 190. The Volunteer Field Engineers consist of four corps, with a total of 349 of all ranks. Besides rifles they carry entrenching tools and all appliances for blowing up bridges and mining fields.

There are forty-one corps of volunteer mounted rifles in the North Island, and thirty one in the Middle Island, with a total strength of 5,478 of all ranks. Of Volunteer Rifle Corps there are a hundred and twenty corps, with a total strength of 7,750 of all ranks including garrison bands, and as an adjunct to these there are 111 rifle clubs comprising about 2,300 men. There are Volunteer Cycle Corps and Bearer Corps at Auckland, Christchurch, Dunedin and Wellington, attached to the infantry battalions at those centres. The Cadet system has been adequately worked up in New Zealand, and there are in all forty one cadet

corps. The whole of the adult portion of the force are armed with Lee-Enfield carbines or rifles, the rifle clubs having Martini-Enfield rifles. New Zealand was especially active in her aid to Great Britain during the Boer War and sent 342 officers, and 6171 non commissioners and men to South Africa during its progress, a greater number than any single Australian State.

For naval defence New Zealand possesses three Thorneycroft torpedo boats, and two steam launches fitted for torpedo work, besides which she shares in the protection accorded by the Australian Squadron.

CUSTOMS.

Most new articles imported into the country are dutyable, and travellers on arrival from a foreign port have to submit to an examination of their baggage. Personal luggage is however passed as a rule without much trouble.

POSTAL AND TELEGRAPHIC.

New Zealand has now a universal penny postage, introduced on the 1st of January 1901. Reciprocal recognition of the penny post throughout the British Empire, with the exception of Australia, has been secured. The penny postage rate is in effect to the Australian States, but not from them. Letters etc., for the United Kingdom, and the continent of Europe, and the United States of America are carried on subsidy by the P. & O., Orient, and the A. & A. lines. The rates of postage are — letters 1 d. for every half oz., books and printed papers to all places $\frac{1}{2}$ d. for every 2 oz., newspapers town and inland $\frac{1}{2}$ d., all other places 1 d. The regulations admit of parcels up to 11 lbs in weight being sent to almost all the most important countries in the world. There were 7,749 miles of telegraph line open in New Zealand at the end of March 1903, carrying 22,672 miles of wire, twenty six telephone exchanges, and forty four sub-exchanges. 4,559,304 telegrams were transmitted during the year 1903, which together with telephone exchange and other telegraph receipts, yielded a revenue of £ 222,494. Communication with the rest of the world is maintained by means of a cable between La Perouse near Sydney and Wakaperaka in Cook's Strait, and also by means of the Pacific Cable which stretches from Southport (Queensland) to Vancouver via Norfolk Island, Doubtless

Bay (New Zealand), Fiji and Fanning Island. The cable rates to the Australian Commonwealth are $4\frac{1}{2}$ d. per word, to Europe $3\frac{1}{4}$; to Capetown $2\frac{1}{7}$; to India $4\frac{1}{11}$; to New York $4\frac{1}{4}$; to San Francisco $4\frac{1}{10}$. Address and signature is counted as part of message.

EDUCATION.

The method of imparting primary education in New Zealand differs in no material degree from that in vogue in the different States of the Australian Commonwealth, ordinary public school education being free and secular, and school attendance compulsory between the age of 6 and 13. Secondary education is supplied by a number of high schools, grammar schools and colleges; and the New Zealand University, a purely examining body, "is empowered to confer the same degrees as the Universities of Oxford and Cambridge".

Exclusive of a number of schools for the instruction of Maori children, there were 1,741 State schools — all primary — in New Zealand at the end of 1903, employing a teaching staff of 3,695, and having an enrolment of 133,748 pupils. Their cost of maintenance and administration for the year amounted to £492,324. The number of private schools at the end of the year in question was 288, with a teaching staff of 840, and a pupil enrolment of 15,200. The Colony has 25 State-endowed secondary schools, with a teaching staff of 173 and a pupil enrolment of 3,722. 862 students attended University lectures during the same year.

CURRENCY.

As in the Australian Commonwealth, no other than British coin is legal tender. Banknotes issued by the different colonial banks are also in use.

RELIGION.

The Church of England has the largest number of adherents in the Colony, and New Zealand possesses a primacy of its own. The constitution of the Anglican Church in New Zealand was settled in 1874 when the whole Colony was divided into the six dioceses of Auckland, Napier, Wellington, Nelson, Christchurch and Dunedin. Up to the year 1895 the primacy belonged to the see of

Christchurch, but in that year it was transferred, and the Bishop of Auckland became Primate of New Zealand. The synodical system of church government by means of a legislative body consisting of the clergy and representatives of the laity prevails in New Zealand.

Of all the States in the Australasian group, the Presbyterian Church is strongest in New Zealand, and ranks next to the Anglican Church in that Colony in the number of its adherents. Next in order comes the Roman Catholic Church, followed by the Methodists, the Baptists and the Salvation Army. The other denominations returned less than one per cent of the population each.

At the census for 1901 the numbers and percentage of the chief denominations were as follows:—

	NUMBERS	PERCENTAGE
Church of England	315,263	40.84
Presbyterian	176,503	22.87
Roman Catholic	109,822	14.23
Methodists	83,802	10.86
Baptists	16,035	2.08
Salvation Army	7,999	1.04
Other denominations	63,295	8.08
	<hr/> 772,719	<hr/> 100.00

QUARANTINE.

The matters in connection with quarantine regulations and kindred subjects are under the administration of the Department of Public Health, with a responsible Minister of the Crown at the head and a director and chief health officer in active control of the office. Government health officers, who are all duly qualified physicians, have been appointed at all the chief ports.

The officials exercise a keen watch over incoming boats and are authorised to place a vessel under quarantine should they consider that the presence (if any) of infectious disease on board is sufficiently serious to warrant isolation.

FINANCE, PUBLIC AND PRIVATE.

The sources of public revenue in New Zealand are those usual in British Colonies. The four principal sources are customs and excise duties, other taxation, railway receipts and post and telegraph receipts, the income derived from these amounting to nearly ninety per cent of the total

revenues. Customs and excise duties alone yield about a third of the revenue. New Zealand is more heavily taxed than any State of the Australian Commonwealth, except Western Australia, the taxation amounting to nearly £4 per head of the population. Of this total about £1 comes from direct taxation such as land and income taxes, stamp duties, and the remainder from indirect taxation. The direct taxation includes probate and succession duties levied on the real and personal estate of testator and intestate, and a land and income tax upon personal incomes, land and mortgages, and also an additional graduated tax upon the unimproved value of land. The graduated land tax is imposed upon all land possessing an unimproved value of £5 or upwards, and it is further provided that an absentee shall pay a graduated tax of 20 per cent additional to the schedule rates. The income tax is payable upon income derived from employment and from business, with an exemplum of £300 allowed to persons domiciled in the Colony, this concession being withheld from absentees. The rate is 6d. in the £ on the first taxable £1,000, and 1/— on every additional £ on the whole sum. Another source of revenue is that derived from the sale or lease of Crown Lands. The heads of expenditure may be divided into Interest and Charges on the Public Debt, Railway, Post and Telegraph, and Public Instruction. The loans floated by New Zealand since the consolidation of the provinces have for the most part been spent, either directly or indirectly, on reproductive works, and the assets of the Colony are more than sufficient security.

There are five banks of issue doing business in New Zealand:— The Bank of New Zealand, The National Bank of New Zealand, The Bank of Australasia, The Bank of New South Wales, and the Union Bank of Australia. Only the first named has its office of chief control in the Colony. The Bank of New Zealand has £2,000,000 worth of Stock guaranteed by the Government. There are in addition Government Post Office Savings Banks to the number of 481, besides five Savings Banks not connected with the Post Office.

The revenue of the Colony for the year ended 31st March 1904 was £7,130,117, and the ordinary expenditure £6,434,281. In the revenue returns the principal items were Customs Duties 38.40 per cent, Railways 32.01, Stamps 15.93, Direct taxation (land and income taxes) 8.21 for the year. The largest item in expenditure was the interest on the public debt which, it may be mentioned amounted to £57,522,215.

COMMERCE AND SHIPPING.

The imports and exports of New Zealand differ very little in character from those of the Australian States. Manufactured products from the United Kingdom, the United States, the continent of Europe, are exchanged for pastoral, agricultural and other products of the soil. The principal imports are Apparel and Drapery, Boots and Shoes, Cotton Piece Goods, Woollens, Hardware and Ironmongery, Iron and Steel, Machinery, Sugar, Tobacco, Spirits, Paper, Stationery etc., Oils and Specie. The proportions per cent of the imports are approximately as follows:— Clothing Drapery etc., 24 per cent, Metal Machinery etc., 19 per cent, Tea and Sugar 6 per cent, Wine, Beer, Spirits and Tobacco 5 per cent, Paper etc., 4 per cent, other imports excluding specie 42 per cent. The chief countries from which imports are drawn, are in the order named, the United Kingdom, the Commonwealth of Australia, other parts of the British Empire, the United States, and Germany. The New Zealand tariff is protectionist in character, specific and ad valorem duties being imposed, the latter varying from 5 per cent to 40 per cent. The average duty on all merchandise is about 20 per cent.

The exports are mainly the products of pastoral and agricultural pursuits, of which the former division is responsible for the greater portion of the total value. The frozen meat trade especially is advancing rapidly to the front as a wealth producer, and already New Zealand mutton and lamb commands a better price than any other variety imported into Great Britain. Very little frozen beef is exported. Butter, cheese and other dairy produce also shows a great advance within recent years, while wool of course, as in others of the Australasian group of colonies, stands at the head of the list of exports. Exports peculiar to New Zealand are Phormium (or New Zealand hemp) and Kauri Gum.

The total imports during the year 1903 amounted to £12,788,675, inclusive of specie to the value of £712,716. The total exports in the same year were valued at £14,838,192, and may be broadly divided as follows:—

Miscellaneous Produce	£ 2,480,775
Wool	£ 4,041,274
Frozen Meat	£ 3,197,043
Gold	£ 2,037,832
Butter and Cheese	£ 1,513,065
Agricultural Produce	£ 744,845
Manufactures	£ 823,358

MOUNT BALLOON AND M'KINNON'S PASS
MILFORD SOUND TRACK.

The shipping entered inwards during the year 1903 totalled 617 vessels of 1,102,064 tonnage. Of these 403 were colonial, 145 British, and 69 foreign. In the same year 608 vessels with 1,113,165 tonnage (401 colonial, 141 British, and 66 foreign) cleared outward.

MINING.

Though less prominent than in the case of the Australian Commonwealth, the mining industry is a very important factor in the prosperity of the Colony, whose mineral resources are extensive and widely distributed. The first hint that parts of the Colony were gold-bearing came almost contemporaneously with the discovery of the precious metal in Australia. Gold was first found in 1852 at Coromandel, and in 1857 the first payable goldfield was opened at Collingwood on the shores of Massacre Bay in the South Island. Further to the south west on the Buller River, alluvial deposits were first opened up in 1859, and in 1861 gold discoveries were reported in the Otago district. The announcement was followed by a great influx of miners from Australia, and the gold mining industry became a settled thing. Gold was found on the sea beaches of the west coast of the South Island in 1865, and very rich deposits were unearthed on the Thames in 1867. At the present time gold is obtained both in the quartz formation, and in alluvial deposits as well as largely in the sea beaches of the west coast of the South Island, and also by dredging, which form of recovery is giving very satisfactory results in the Otago district. The principal centres of the gold mining industry on the quartz reef side are at Coromandel, the Thames Valley, Te Aroha, and elsewhere on the southern part of the North Island; in the Collingwood district, Lyell Reefton, Cedar Creek, the Otago district, the basin of the Clutha, and at other places in the South Island. Alluvial mining is carried on in the Marlborough, the Nelson, and the west coast districts of South Island. Large goldfields exist in the Grey Valley, in the Arrow and Shotover rivers, and at numerous other centres. The principal gold mine is the Waihi Mine in the North Island, whose output in 1903 amounted to the value of about £ 650,000, against £ 521,574 for the previous year.

The Government encourages prospecting by subsidising parties bona fide searching for gold, and in other ways assists in the development of the industry.

Prior to the 31st of December 1903 gold to the value of £63,149,147 had been obtained in the Colony, the produce of the last twelve months of that period being 533,314 oz. (value £2,037,831).

Coal mining is next on the list, the extent of the carboniferous deposits of New Zealand making coal mining one of the most important industries in the Colony, especially on the west coast of the Middle Island where bituminous coal exists of equal if not superior quality to that found in any other part of the world. Brown coal and lignite are also found in the Otago and Southland districts. The value of coal mined up to December 1903 was £9,938,193, the production for the last year being 1,420,193 tons, valued at £762,858.

Kauri gum is a considerable wealth producing factor in the Auckland district of the North Island, the total area of the gum fields being estimated at a million and a half acres. The best gum is taken from under the ground, the equipment of the gum digger consisting, besides a spade and an axe, of a long rod to prod for indications of the lumps of gum. Kauri gum is the solidified turpentine of the kauri pine, and occurs in great abundance in a fossil condition, pieces having been found weighing as much as 100 lbs. The trade in kauri gum began as far back as 1847, and at the present time 7,000 or 8,000 persons are engaged in gum digging, including not only the professional digger, but also the settlers who thereby supplement their earnings from the fields, and the Maoris who take to it when their crops are a failure. The Austrians, of whom there are large numbers on the field, prove the most industrious diggers, turning over the whole surface of the ground at likely looking spots instead of merely prodding here and there. The industry is so important that it is regulated by an Act of the Colonial Legislature. The large amount of £11,857,270 worth of kauri gum had been extracted up to the 31st of December 1903, 9,357 tons valued at £631,102 being taken out in 1903. Kauri gum may be said to average about £60 per ton in price.

Silver has been found in various localities, and occurs mixed with gold in Te Aroha, Thames and Coromandel fields of the North Island, and elsewhere. The total production until the end of 1903 amounted to £544,278, of which £91,497 was produced during the last year of that period.

Other minerals raised during the year under review represented an aggregate value of no more than £7,366.

The principal among the less important minerals which have been worked in New Zealand are Copper, Chrome, Manganese

and Antimony. Sulphur is also found and exploited in the volcanic districts of the North Island. Deposits of phosphate rock have been discovered, and operations of manufacturing and utilizing it as a fertilizer, have been commenced on a commercial scale. There are also indications of mineral oil in several parts of the Colony.

Precious stones are represented by opals and rubies, and the New Zealand greenstone — if that may be classed among them.

AGRICULTURE.

In the matter of agricultural advancement, New Zealand compares very favorably indeed with the conditions obtaining in Australia, producing nearly one fourth of the total value of crops in the group. Her average value of agricultural produce per head is also very high, being exceeded only by that of South Australia.

The principal crops grown are oats, barley, maize, rye, hay, turnips and other crops. As regards acreage, Canterbury has the largest number of acres under wheat, followed by Otago, the positions being reversed in oats. The greatest amount of maize is grown in the Auckland province.

The acreage and actual yield in grain crops for 1903 was as under:—

Wheat	194,355 ac.	7,459,915 bus.	Average 38.37 bus. per acre
Oats	483,659 "	21,766,708 "	45.00 " " "
Barley	27,921 "	1,136,232 "	40.69 " " "
Maize	12,038 "	607,609 "	50.48 " " "

The area under potatoes in 1903 was 31,408 acres yielding 193,267 tons. Of turnips and rape, which are used mainly for sheep feeding purposes, 572,686 acres were under crop in 1903. The extent of land under orchard was 26,486 acres, but the fruit crop of the Colony has still to be supplemented from Australia and Fiji.

As is the case in Australia, most of the best land is in the hands of large private holders, and generally commands high figures when sold. In recent years however, some of the large estates have been repurchased by the Government for closer settlement. Land for settlement, agricultural or otherwise, may be acquired from the Crown under various conditions in New Zealand. Crown lands are divided into three classes:— Town and village lands, the upset prices of which are respectively not less than £20 and £3 per acre; suburban lands, upset price £2 per acre; and rural

lands, classified into first and second class lands, according to quality, and which may be purchased at auction at no less than £1 per acre for first class and 5/— per acre for second class lands, or may be acquired under selection conditions. Town, village and suburban lands can only be acquired at auction. Except for pastoral purposes no person may hold more than 640 acres of first class, or 2,000 acres of second class land. Under selection conditions, land may be selected for cash with the proviso that within 7 years it shall be improved, in the case of first class land to the extent of £1 per acre, and in the case of second class land to the extent of 10/— per acre. One fifth of the price is payable at the time of application. After notification lands may be selected for occupation with right of purchase under a license for 25 years, and the freehold may be acquired at any time after the first ten years. The rent is 5 per cent on the cash price of the land. Lands may be selected on a lease for 999 years, or in perpetuity at a rental of 4 per cent on the cash price. Under all modes of selection, the conditions of residence and improvement are the same. Residence is compulsory and must commence on the selection within a year of the date of selection (four years in the case of bush or swamp lands). Groups of persons numbering not less than twelve may apply for a block of land of not less than 1,000 acres nor more than 11,000 acres in extent. The price of land within a special settlement cannot be less than 10/— per acre. Special regulations for improved farm settlements, varying from 10 to 200 acres, are also in force, preference being given to married men. The land is leased for 999 years at a rental of 4 per cent on the capital value, plus 5 per cent on the amount advanced by the Government for clearing, grassing etc. Residence for the first ten years is compulsory.

DAIRYING.

Owing both to Government supervision and to private enterprise, the dairying industry in New Zealand is rapidly advancing in importance. With the Colony's system of small farms and artificial pasturage to aid the natural resources, dairying stands every chance of success. The Government has spent large sums of money in teaching the art of butter making by the factory system, and, as in the Australian States, the tendency has been to build up large central butter factories with contributing stations; and furnished with cream separators at convenient centres, in the different districts. Many of the dairy farmers have their

own separator and send in their cream to the factory direct, others bring their daily milk supply to the separating station. In some districts the co-operative system is working well. In this system the farmers themselves are the owners of the butter factory and divide the net profits according to the amount they individually contribute at the outset. The New Zealand Government, through the Department of Agriculture, materially assists the industry by instruction in butter making, and in the proper method of packing and shipping. Indirectly also assistance is being given by the stringency of the export regulations. Graders examine all butter and cheese for export, and brand each package with its proper quality, so that dairymen are constrained to make the best effort towards turning out the highest grades. Milk is thoroughly sterilised before treatment, and Government Inspectors are continually on the watch for the detection and destruction of tuberculous and other diseased cattle. The Government have also imported several first class bulls for the use of settlers who cannot afford such expensive sires of their own, and in other ways the authorities, recognising the advantages of dairying to the small settler, are helping to expand the industry. Pig raising, that helpful adjunct to dairying, might with profit receive more attention in New Zealand, and there is room for enormous extension in the industry.

For year ending 31st March 1903 the export of butter reached 263,196 cwt., valued at £ 1,268,759, and of cheese 74,611 cwt., value £ 181,604, or a total of £ 1,450,363. On the date mentioned there were 472,163 cows and heifers used for dairying purposes in the Colony. In September 1902 there were 276 cheese and butter factories and creameries with 319 skimming stations. The North Island contains more than twice as many dairy cows and other cattle as the Middle Island. Pigs have decreased since 1891 when the number was 308,812 against 193,740 for 1902—3.

PASTORAL.

For pastoral selection in New Zealand small grazing runs are divided into two classes. Firstly those not exceeding 5,000 acres, and secondly those not exceeding 20,000 acres in area. These runs are leased for a term of twenty one years with a right of renewal for a like term at a rent of $2\frac{1}{2}\%$ on the capital value of the land. A selector may not hold more than one small grazing run, nor may he hold any freehold or leasehold land of any kind whatever

over 1,000 acres, exclusive of the area for which he applies. Residence and improvements are compulsory. Purely pastoral country is let by selection for a term not exceeding twenty one years, but no run can be of a greater carrying capacity than 20,000 sheep or 4,000 cattle. No one can hold more than one run unless it possesses a smaller carrying capacity than 10,000 sheep or 2000 cattle, in which case the lessee may hold additional country up to that limit. Fostered by the expansion of the frozen meat industry, the breeding of cattle and sheep has shown a steady improvement during the last ten years. Excluding those bred for dairy purposes, the cattle are mostly raised for export. But the strength of New Zealand lies in her sheep, climate and grasses being apparently adapted to the growing of sheep which are good producers, both of wool and flesh. New Zealand Mutton and Lamb is beginning to be known all over the world. Two important advantages of sheep farming in New Zealand are the low cost of the production of mutton, and the high percentage of natural increase. The principal breeds of sheep raised in New Zealand are Lincoln, Romney, Southdown, Shropshire, Leicester and Merino, and the different cross breeds obtained from these varieties. In point of numbers the North Island is slightly ahead of the Middle Island, though as regards provincial districts the wide plains of Canterbury support the largest individual number. In cattle, crosses are by far the most numerous, totalling over 92 per cent of the whole. Shorthorns, Hereford, Polled Angus, Ayrshire and Jersey are also favored in that order. The North Island possesses 65 per cent of the cattle in New Zealand.

In the products of pastoral pursuits, wool still holds first place as regards value, though the frozen meat industry is gradually overhauling it. The frozen meat industry, the products of which are now second on the list of exports, has really been of phenomenal growth. Beef is not exported to any great extent, the stock breeders confining their attention mainly to sheep. Frozen rabbits and hares are also exported in large quantities.

The number of live stock in the colony on the 31st of March 1903 were as follows:— Horses 286,955, cattle 1,460,663; sheep 20,342,727; pigs 193,740; asses and mules 464. New Zealand takes second place in the Australasian group for number of sheep, and fourth for the number of her cattle and horses.

The quantity of wool produced in the Colony during the year ending 30th September 1903 was 166,214,345 lb.,

of which 5,294,652 lb., were purchased by local mills, while 160,919,693 lb., were exported. Since the year 1890 there has been a marked tendency towards multiplication of smaller flocks.

In 1903, 2,378,650 cwt. of frozen meat valued at £ 3,197,043 was shipped from the Colony. Included in this there were 588 cwt. of hares, 112,972 cwt. of rabbits, but not frozen fish, preserved meats, salted beef, pork, bacon and hams, of which quantities aggregating £ 133,887 were exported during the same year. Other important pastoral produce are tallow and hides, sheepskins and pelts.

MANUFACTURES.

New Zealand is not a manufacturing country in the sense of the European countries and the United States, though a protective tariff enables those who follow secondary production to compete on equitable terms with imported goods. But the manufacturing for export purposes in the wide sense of the term is not practised, the bulk of wealth production being in the direction of primary products.

These remarks of course must not be held to refer to the meat freezing establishments and the butter and cheese and other kindred factories which prepare the great pastoral products for export, and which are usually classed under manufactories. But excluding these, the amount of goods manufactured for export purposes is comparatively small. The chief industries in the Colony are in order of the value of output:— Meat freezing, preserving and boiling down works; tanning, fellmongering and wool scouring; butter and cheese factories; sawmills, sash and door factories, iron and brass foundries, clothing and boot and shoe factories, printing establishments, grain mills, breweries and malt houses. For the encouragement of local industries bonuses have from time to time been offered by the State, one of the most recent being £ 1,750 for a machine or process for dressing New Zealand hemp, also £ 250 for a process for utilising the waste products of the hemp. Locomotives, engines and railway trucks are made in the Colony both at Government and private works. The principal centres of the manufacturing industry in New Zealand are the provincial districts of Otago (chief town Dunedin), Auckland, Wellington and Canterbury (chief town Christchurch).

According to the latest figures the number of manufactories and works in operation in New Zealand was 3,960,

the number of hands employed 52,628 (male 41,022, female 11,606). The value of materials used or operated upon was £9,166,787, and the value of all manufactures turned out was £16,339,450.

SHOPS.

In all of the principal towns there are large retail shops where anything is obtainable at prices about 50 per cent in advance on those of Europe, but otherwise differing little from similar establishments in other parts of the world. Woollens, which are manufactured in the country, especially excellent travelling rugs, can be bought with advantage in the Colony.

TOURS.

The very name of New Zealand conjures up visions of tourist trips — always to the Australian, and with increasing frequency to the residents of the old world. The innumerable attractions it offers to visitors in this direction are the Colony's strong point, and as a consequence there is always a considerable floating population within its borders. The Government have moreover recognised that this stream of visitors benefits the community, and have energetically taken up the task of preparing the country for the guests — opening up new roads and tracks, clearing away impediments to travel, developing picturesque districts, advertising the Colony's beauties broadcast by means of photographs and pictures, and generally displaying great activity in making the country and its capabilities known, while at the same time they have not forgotten to cut down travelling prices, and, by a system of liberal excursion rates, have made the various districts still more accessible to the man of moderate means. A plenitude of information is obtainable from many different sources, and in the chief centres are bureaus, public and private, where the tourist may readily be directed as to the best and most expeditious method of reaching any place upon which he has set his heart.

In endeavoring to direct the tourist, the would-be guide is met at the outset with a true embarrassment of riches. There are the hot lakes and geysers of the North Island, culminating in Waimangu, the greatest geyser in the world, the Southern Alps with glaciers surpassing those of Switzerland in size, and the cold lakes and magnificent fiords of

the South Island to choose from, besides volcanoes, thermal springs and gigantic waterfalls, among which again, the Sutherland Fall (1,904 feet) near Milford Sound, holds the world's record for height.

The best known and most popular tourist and health resort, by reason of its easy accessibility, is the Hot Lake District of the North Island, of which Rotorua is the residential centre. The town is 171 miles south east of Auckland, from where it can be reached by rail in eight hours.

Once at Rotorua, the whole fairyland of wonders, which covers an area of nearly a thousand square miles, opens to the visitor. In addition to a series of famous hot springs with medicinal properties, at the township itself, there are numerous sights in the immediate neighbourhood, and the geysers of Whakarewarewa, the native settlement of Ohinemutu, the legendary bath of Hinemoa, the sites of the buried villages and pink and white terraces, and the great Waimangu geyser, may be easily reached from that base. At Rotorua there is a sanatorium under Government control, where medicinal baths of various kinds can be taken under proper supervision. At the same time some of the hotels and boarding houses have thermal springs and medicinal baths in their own grounds. Another Government Sanatorium has been established at Hanmer in the Canterbury district. It is 24 miles from Culverden, the northern terminus of the trunk line in the Middle Island, and is best reached from Christchurch (68 miles S. E.). Return excursion tickets are issued daily from October and April, and are available for two months. Return through fare from Christchurch first class 30/—, from Dunedin 82/6, from Invercargill 115/—.

Of a very different character to the above localities is the Cold Lakes District of the South Island. These lakes are in the Canterbury and Otago provinces, and are most easily reached from Dunedin. The large cold lakes are twelve in number, and are all famous for their scenery. They are somewhat difficult of access, but their beauty fully compensates for all inconveniences. Among the most beautiful of these lakes are Lake Manapouri, and Lake Te Anau, but perhaps the best known is Lake Wakatipu, which for years has been connected by rail with the coast.

For the mountaineer and "Alpine clubman", there are ample opportunities in the great Alpine chain of the Middle Island. Few of the peaks of that rugged mass have as yet been scaled, and its wonders are only now becoming known. Some of the summits reach a height of from 10,000 to

12,000 feet; Mount Cook, its highest peak, rising to 12,349 feet. Bordering the lakes and fiords of the southern portion of the Island, are also numerous magnificent peaks, which, though of lesser altitude, are crowned with perpetual snow. Mount Aspiring, near Lake Wanaka, in the Lakes district is however nearly 10,000 feet high, and has been aptly called the New Zealand Matterhorn.

From a scenic point of view there are many other fine trips to be made in the Colony. In the North Island there is the Wanganui River famous for its beautiful scenery, the Lake Waikaremoana, and Lake Taupo with its active snowcapped volcanoes Ruapehu and Tongariro, while the coach roads between Taupo and Napier and Waipourou-Pipiriki, leads partly through magnificent mountain scenery. But as the coachroad is often a mere shelf on the face of a precipitous cliff, these last named journeys will be little appreciated by the nervous traveller.

In the Middle Island, anyone in quest of scenic beauty should make the journey from Nelson to Greymouth on the west coast (rail and coach), passing through the Buller Gorge. From there the Southern Alps may be recrossed by way of Arthur's Pass, and the justly famous valley of the Teremakau and Otira. Further south again is the glacier district, adjacent to the cold lakes district, and on both sides of the range. The principal glaciers are: Tasman (length 18 miles, area 13,664 acres); Murchison (length 10 miles, area 5,800 acres); Godley (length 8 miles, area 5,312 acres); Mueller (length 8 miles, area 3,200 acres); Hooker (length 7 miles, area 2,416 acres).

Finally there are the sounds or fiords of the south western coast, long narrow sheets of water with innumerable tortuous arms running far up into the land between great, rugged cliffs and gigantic mountains, clothed with verdure to the snowline, and displaying waterfalls, glaciers, and snowfields at every turn. Some of the mountains rise almost precipitously from the water's edge to a height of 5,000 and 6,000 feet. The most famous fiord is Milford Sound, with the great Sutherland waterfall (1,904 feet), fourteen miles inland. Milford Sound, though only 8 miles in length, contains some of the grandest scenery in the world. George Sound is larger than Milford Sound and also very picturesque. The sounds, of which there are thirteen usually listed for the tourists inspection, can be reached by steamer from the Bluff during the summer months, while Milford Sound is also accessible by land. The latter route, which necessitates a walk of 32 miles, is without exception the most picturesque tour in New Zealand. Though this beautiful wilderness is

HAWK'S CRAG, BULLER GORGE
NEW ZEALAND.

practically uninhabited, its visitors during the touring months are very numerous, and no one can leave disappointed with the grandeur of the scenery that is seen from the vessel's decks as she passes up the Sound.

More detailed directions to the principal sights and tours will be found under their different headings, but, unlike in the other colonies, the traveller will here find no difficulty in obtaining the latest and best information from the Government Tourist Offices, as well as from private travelling agents, such as Thomas Cook and Son. Numerous detailed guide books are obtainable, of which the "Itinerary of Travel in New Zealand", published by the Government, and "New Zealand as a Tourist and Health Resort", published by Thomas Cook and Son (both obtainable free of charge on application) are the most useful.

The following rough sketch which includes the main points of interest, will be found a good programme of a two months tour through New Zealand, north to south:—

From Auckland to Rotorua, thence via chain of lakes to Waimangu, thence by coach to Wairakei, the Huka Falls and Lake Taupo. From Taupo either of the following three routes may be selected:—

- A. Return to Rotorua, thence by rail via Frankton Junction to Taumarunui, thence by steamlaunch down Wanganui River to Wanganui, thence by rail to Wellington.
- B. By steamer across Lake Taupo to Tokaanu, thence by coach to Pipiriki via Waiourou, thence by river steamer to Wanganui, thence by rail to Wellington.
- C. By coach to Napier, thence by rail to Wellington.

From Wellington to Nelson, either direct or via Picton and Blenheim. From Nelson to Motupiko by rail, thence by coach to Reefton, thence by rail to Jackson, thence by coach via Otira Gorge to Springfield and on by rail to Christchurch. From Christchurch by rail to Eversley, thence by coach to the Hermitage (near Mount Cook). From the Hermitage to Queenstown, Lake Wakatipu, by coach, either via Lake Hawea and Wanaka, or via Cromwell. From Queenstown by lake steamer to Kingston, thence by rail to Lumsden, thence coach to Lake Te Anau, thence lake steamer to accommodation house at head of lake, thence overland to Milford Sound, or, if a steamer trip to the sounds is contemplated (sound excursion steamers usually run in January only), from Queenstown by train to the Bluff, where steamers call on their way to the sounds.

The cost of the above tour including side trips, may be estimated at between £ 70 to £ 100.

SPORTING.

Horse Racing. Horse racing is almost, if not quite as popular as it is in Australia, and the meetings at Auckland, Christchurch, Dunedin, Wellington and Napier are all exceedingly well attended, while the country race meetings also flourish. As bookmakers are not allowed on the Jockey Club grounds, the betting on the race course is usually done under the totalisator system, £1 being the usual lowest limit of each individual bet.

It may here be said that New Zealand has produced, and still continues to produce, a large number of winners of the "Musket" breed, well known among racing men the world over. Foremost among these was the celebrated Carbine, the finest racehorse ever seen on the Australian turf, and which has since been sold to England for stud purposes. At the end of 1904, the thorough bred in the Colony numbered nearly 7,000.

Hunting is also a popular sport, especially in the Hawkes Bay district.

Football, Cricket etc. New Zealanders are famed for their skill and science in football at which they are invincible. The most popular game is Rugby, with fifteen aside and an oval ball. The principal clubs take it in turn every year to send representative teams on tour throughout the Colony. Great enthusiasm is displayed in the principal contests, the spectators numbering by thousands. New Zealand football teams visited Australia on three occasions carrying all before them, while the Maori team on their tour through England, only lost twenty out of seventy-four games, drawing five. Football in New Zealand is a winter sport, while cricket is played during the summer months. Other sports are tennis, golf, rowing and athletics of various kinds.

Fishing. The remarkable thermal phenomena and the magnificent scenery of New Zealand are by no means the only attractions which it offers to the traveller. It is, at least from an anglers point of view, one of the best sport grounds in the world. The colonists have liberally stocked their rivers and lakes with trout and their hills with deer, and the result is that anglers and deerstalkers voyage to Maoriland even from the other side of the globe for the sport which it affords. New Zealand now not only offers among the finest trout fishing in the world, but also abundant opportunities for the nimrod. Thanks to the energy of the acclimatisation societies splendid fishing is now available in

almost every part of the country from October to April, on payment of a license fee of £1. Shorter licenses are also obtainable at the rate of 5/— per month or 2/6 per week. Ladies and boys under 16 years pay 10/— for a seasons license, 3/— per month, and 1/6 per week.

In the North Island, the streams and lakes in the Rotorua district give the best sport, and the biggest fish. The rainbow trout do particularly well there and are great fighters. For lake fishing, trolling with minnow meets with most success, but in the neighboring streams artificial fly is principally used. Some splendid "takes" have been made at Rotorua, and in 1904 two anglers landed in one day 27 rainbow trout weighing 168 lbs., while another secured in two days 44 trout, the weight of which was 275 lbs. A lady angler grassed a 16 lbs. fish. A leading sportsman, kept a record during the season under review, which shows that in 1904 6,952 trout were caught in Rotorua Lake and adjacent streams, the aggregate weight of which was 30,681½ lbs., or, to bulk it, nearly 13 tons, 14 cwt. From the 12th to the 15th of April 174 fish were taken, the aggregate weight of which was 786½ lbs. Among the trout landed were many weighing 14 lbs., 13 lbs., down to the modest 4 and 5 pounder. While every care was exercised by the sportsman in question in keeping this record, many of the anglers failed to supply him with particulars of their catches, and the figures given above may therefore be looked upon as about two-thirds only of the total actual quantity taken from the lakes and streams.

Outside the Rotorua district, however, good fish may be had in almost every stream in the island, and some of the clear shingle-bed streams through the bush afford sport and scenery combined to please the most fastidious.

The South Island streams are as well stocked as those of the North, and fish of 20 lbs. weight and over are frequently caught. A brown trout recently landed near Blenheim, in the Marlborough Province, measured very close on three feet in length, and twenty-three inches in girth, and weighed 28½ lbs. But the champion trout, so far, is a 38-pounder caught at Lake Wakatipu, Otago. It is but fair, however, to mention that both these fish were netted.

In the South Island the best fish — mostly sea-run — are got near the mouths of the shingle rivers in South Canterbury, principally with artificial minnow. Excellent fishing, however, can be got all over the country. So far the rainbow trout have not thriven quite so well in the

southern rivers and lakes as they have done in those of the north. It is the best plan in the fishing season to work the northern rivers first and gradually move south to the colder rivers of the Middle Island where the fish are later in growing into condition. Outfits may be bought at any of the large centres.

Deep-sea fishing enthusiasts will find the coasts of New Zealand a truly happy hunting ground. The harvest of the sea is nowhere more prolific than on the east coasts of these islands. The king of the edible fish, in point of size, is the monster hapuka, often weighing over a hundred-weight! A favorite summer pastime of Aucklanders and dwellers in other seaside towns is to make sailing or steam excursions to the hapuka-grounds, where prodigious hauls are often made. Other fish common in the bays and harbors of the coast are the trevally, moki, red cod, flounder, groper, schnapper, tarahiki, whiting, patiki, barracouta, rawa, kahawai, blue cod and ling, all excellent eating fish. A delicate fish called the trumpeter is only caught at the Kaikouras. In the summer time a good day's sport may be had by going out with the fishermen from any of the ports, who will provide lines, baits etc., for a small fee. For sea fishing no license is necessary.

Shooting and Deer Stalking. As has been said, the deer-stalking to be had in New Zealand attracts sportsmen from various parts of the world, including Scotland, the home of the antlered "monarch of the glen". Red, sambur and fallow deer have thriven well in New Zealand. In the North Island fallow deer are very numerous in the Waikato district, and red deer in the Wairarapa. The latter district affords sport that will compare favorably with that in any part of the world. The country is rough, timbered, and well stocked with stags growing antlers of dimensions calculated to satisfy the most exacting of hunters. Some of the best stag-shooting is on private land. The station-owners, however, invariably extend a welcome to visiting sportsmen.

Very excellent red deer-stalking is obtainable in the neighborhood of Lakes Wanaka and Hawea, in the South Island. Red deer are plentiful round the latter lake. They have, as a rule, longer, but not such massive antlers as those of the Wairarapa stags. This lake region of Otago is an ideal stalking country. The grand mountain and lake scenery partakes of the character of the Scottish Highlands, but is framed on a much more majestic scale. Fallow deer are plentiful on the Blue Mountains at Tapanui, one day's

journey from Dunedin. In the Nelson district red and fallow deer are also very plentiful.

The cost of a season's shooting in the Colony, is moreover, very small as compared with that of other countries. British sportsmen have found it less expensive to travel round the world and stalk the red deer in the Wairarapa and Otago districts of New Zealand, than to hire a season's range of shooting country in Scotland. A license costs from £ 1 to £ 3, according to locality, and entitles the holder to shoot from four to six stags. Sportsmen are not permitted to shoot stags carrying less than 8, and in South Wairarapa no less than 10 points. Hinds and does are absolutely protected. The deer-stalking season varies in the different provinces between the 22nd of February and 21st of May.

Good shooting of other small native and imported game may be had in most parts of the Colony. Here again acclimatisation has been very successful, and many of the British and European game birds are very plentiful. There is a fixed season for shooting, usually from the 1st of May to the 31st of July, and a license (fee 20/—) must be obtained; any post office issuing such. Game in the North Island simply abounds in many places, and the list is as follows:— Pheasants, Auckland and Taranaki; swamp hen, quail, hares, ducks, pigeon and teal around Gisborne; snipe Nelson Province, wild goats and pigs Wellington Province. In the South Island are numerous varieties of wild ducks, pigeons, chiefly on the west coast; Pukaki (swamp hen), quail, hares, wild geese, black swan, deer, and wild pigs, Mountains of Otago. Good sport with the despised rabbit, which has become a great pest, may be had within an hour's journey of any of the chief centres of the Colony.

The following game is absolutely protected at all seasons of the year:—

Sambur (Ceylon Elk), huia, white heron, tui, crested grebe, hen pheasant, kiwi, blue duck. Protected in 1904 and every third year thereafter, — kaka, pigeon and pukeko (except in Marlborough).

Protected in certain districts, — Pukeko: Marlborough; Bittern: Otago and Southland. Morepork owl: Southland. English mallard duck: Wellington. Paradise duck: Wellington and Marlborough. Hares: Lake, Pahiatua, Wallace, Southland and Stewart Island. Wild geese: Otago. Californian quail: Lake, Wallace, Southland, and Stewart Island.

TRAVELLING AND EXTERNAL COMMUNICATION.

New Zealand is fairly well served with oversea shipping. Between England and New Zealand the Shaw Saville and Albion Company maintain a monthly service via Teneriffe, Capetown and Hobart, while the same monthly service on the homeward voyage proceeds via Cape Horn calling at Rio de Janeiro and Teneriffe. The same route is followed by the New Zealand Shipping Company's steamers, also with a four weekly service, except that on the homeward trip Monte Video is touched at, and Rio de Janeiro passed by. Most of these big cargo steamers visiting New Zealand ports also have accommodation for a few passengers. The best communication is however maintained between Australia and the Colony, between where well equipped vessels of both the Union and Huddart Parker Companies fleets keep up a regular and frequent service, both to Sydney and Melbourne, affecting connections with the Norddeutscher Lloyd and other mail steamers. Between Sydney and New Zealand there is a direct service, while communication with Melbourne is usually via Hobart. The ships of the A. and A. line between San Francisco and Sydney also call at Auckland going and returning.

The passage between Sydney and New Zealand occupies $3\frac{1}{2}$ to $4\frac{1}{2}$ days according to steamer. The Union S. S. Company also maintains a regular service between Auckland, Tahiti and Rarotonga, and between Auckland, the Friendly Islands, Samoa and Fiji.

The New Zealand coastal service is an efficient one, though the stormy seas around the islands often make the passage very unpleasant. The tourist however, need suffer little from this discomfort as he will be mainly concerned with the overland route.

The summer months, from the beginning of November to the end of April may be considered as the tourist season, and it is during these months only that the most interesting of the South Island trips can be made, not so much on account of the weather, as for the reason that the means of communication, such as lake steamers and coaches (on certain routes), are suspended during the winter months. The Government accommodation houses in the Middle Island are also closed during that period. This however, does not affect the sights of the North Island, which are accessible all the year round, although coaches and steamers ply at less frequent intervals during the winter season. Except in the late autumn, the tour will be found much more enjoyable,

when made from north to south, as the scenery gradually increases in grandeur, if seen in that order, until it finds its climax in the marvellous west coast sounds; whereas the opposite result is of course obtained if the start is made from the south.

As the railroad only traverses the more settled and consequently less interesting country from a senic point of view, much of the travelling in the touring districts has to be done by coach, which naturally prohibits the carrying of much luggage. Gladstone bags are the most suitable articles of luggage on such trips. The heavier luggage may be sent on to the next port through one of the different Express Companies. Coach travellers should also remember to provide themselves with warm clothing as on lofty passes low temperatures prevail even during the summer. A rain coat, and if possible a woollen rug, should also form part of the traveller's equipment.

The cost of coach travelling averages about sixpence per mile, and more for short distances. Railway fares are cheap, 1½d. per mile being about the average for first, and 1d., or less per mile for second class travelling. (Vide 'Railways' for further particulars.)

With the exception of parts of the east coast and perhaps the hot lake district, New Zealand on the whole can not be said to be a country for bicycles, although there are of course numerous roads, where that mode of locomotion could be adopted with advantage. But a cycling chart of New Zealand, which is evidently a pressing need, remains yet to be published.

HOTELS ETC.

The hotels of New Zealand resemble those of Australia, both in quality and scale of charges. In most of the principal towns excellent hotels may be found, while in the more remote districts, hotels are inferior in their accommodation yet dear (by comparison). The tariff at first class hotels throughout the Colony varies between 10/6 and 12/6 per day (American plan of inclusive tariff), that of second class establishments between 6/— and 10/— per day. 10/6 may be taken as an average for actual hotel expenses while travelling. Morning and afternoon tea is usually included in the general charge. Baths are free.

Boarding houses are numerous in the cities, or any of the more frequented tourist resorts, the charges varying between £ 1.5.0 and £ 2.10.0 per week. Government

accommodation houses have been erected where it has been found necessary. These houses are, as a rule, well conducted and comfortable, the charge being 10/— per day.

Laundry work is arranged through the medium of the hotels, the charges being similar to those obtaining in Australia.

RAILWAYS.

The distribution of population in New Zealand necessitated, at the commencement of railway construction in the Colony, the laying down of lines, unconnected one with the other, but each having for a terminal port one of the chief cities around which settlement had been most active. For convenience of working, the railway system, or rather systems are now divided into ten sections. In the extreme north of the North Island are the Opuā-Kawa Kawa, and Wangarei-Hukerenui sections, feeding coal fields, and the Kaihu-Dargaville section, tapping large timber areas. The Auckland section has its terminal station at that city from which lines run north to Kaipara Harbour, and due south to Taumarunui in the centre of the island. From this southern line branches out to the eastward a line running to Rotorua, and another curving northward to the Thames. From Wellington again a line runs north east to Napier, from which again a line branches off to the westward, running through the Taranaki district and terminating at New Plymouth. It is intended ultimately to construct a main trunk line from Auckland to the Bluff, with a connecting steamer service across Cook's Straits, but, as has been shown, the junction between the Auckland and Wellington sections has not yet been made. The progress in this project has been better in the South Island, where alone the section Seddon-Culverden remains to be connected to complete the line, which runs through Christchurch, Timaru, Oamaru, Palmerston, Dunedin, Invercargill and on to the Bluff. Numerous branch lines join this main line at intervals, and in the Canterbury and Otago districts these feeder lines intersect the country very efficiently. The principal of these lines are those leading to Otarama, Fairlie, Hakataramea, Ida Valley and Kingston, with connecting steamers to Queenstown on Lake Wakatipu. There are also unconnected lines on the north and west coast of the Middle Island, viz: — Picton-Seddon, Nelson-Motupiko, Reefton-Hokitika with branchline to Otira, and Westport to Mokihinui Mine. The only line in private hands is a line

running from Wellington to Palmerston (about 113 miles), a route which however is also served by a Government line.

The management of the Government Railways was formerly under three commissioners, but in 1895 the Government resumed charge of the lines, and the control is now under a general manager who is responsible to the Minister for Railways. The gauge of all Government and private lines is 3 feet 6 inches. The proportion of working expenses to gross earnings works out at about 65 per cent, though of late years the percentage has increased owing to the increasing age of the lines, and to the fact that the pay of the employees has been augmented. A considerable portion of the track is still laid with light rails, though present railway locomotion has developed to such an extent that it will soon require the heaviest type of locomotive and rolling stock to deal with it. Until heavier rails are adopted and the bridges strengthened, these improvements obviously cannot be carried out in New Zealand. In spite of all this, however, gross earnings have very substantially increased during the present decade, and the net earnings for 1902 were the highest in the decennial period — an evidence of the fact that the extensions during recent years have been judicious, and that the volume of traffic has been maintained.

On the 31st of March 1904 there were 2,328 miles of Government line open for traffic, of which 901 were in the North Island, and 1,427 miles in the Middle Island. The total cost of construction up to that time had been £ 20,692,911, including money spent on harbour works forming part of the railway system. The train mileage run during the twelve months ended 31st of March 1904 was 5,685,399, the passengers carried numbered 8,306,383, and the goods and live stock aggregated 4,259,217 tons. There were in the same year 377 locomotives, 809 passengers carriages, and 13,433 goods and live stock vehicles in actual use on the lines.

The annual railway statement for the year 1904 shows that the earnings in the financial year 1903—4 amounted to £ 2,180,641, and the expenditure to £ 1,438,724, giving a net profit for the year of £ 741,917, equal to 3.58 per cent on the capital invested in open lines. The estimated revenue for the current year (1904—5) is £ 2,200,000.

The passenger fares are reasonable. As has been said elsewhere, the first class single fare may be taken as averaging about 1½ d. per mile, and those of second class about 1 d. per mile, while holiday excursion tickets (return) are obtainable at the rate of 2 d. per mile first, and 1 d. per mile second class. Mileage to count one way only.

Special inducements are offered to tourists, and excursion tickets (first class only), are issued daily (Sundays excepted) at the following rates:—

- A. Available over all lines of both islands for six weeks from date of issue £ 8.
- B. Available over all North Island lines for four weeks from date of issue £ 5.
- C. Available over all Middle Island lines for four weeks from date of issue £ 6.

These tickets may be further extended for any period not exceeding four weeks, on payment of an extension fee of £ 1.10.0 per week. Only small articles of luggage such as can be conveniently stowed under the seat or on the hat rack, are allowed in the carriage, but passengers are entitled to the free carriage of 1 cwt. of luggage.

Care should be taken to see that luggage is properly labelled, as the authorities do not hold themselves responsible for any loss. There are cloakrooms at every station where luggage may be left at the rate of 2 d. for each article not exceeding 56 lbs. in weight. Refreshments can be obtained at a number of the principal stations, or, where this is not practicable, on the train itself. The charges in both cases are 2/— for luncheon, and less for sundry light refreshments such as tea, coffee, cocoa, sandwiches etc. At the refreshment rooms, spirituous, liquors etc. may also be had at reasonable prices.

The railway time throughout the Colony is Wellington time. No trains run at night, and no long-distance trains are dispatched on Sundays. From a tourist's point of view it may be said that, though the carriages and equipment are not equal to those of Europe, and perhaps not even of Australia, travelling on the whole will not be found uncomfortable. The gauge of line being narrow, the cars are necessarily so, and compartments holding six persons and leading off an enclosed gangway on the side of the car are usual on long journeys. The cars are connected by a footboard, but as the platforms are unprotected and open, the passage from car to car, which often becomes necessary while the train is in motion, as for instance when lunch is served on the train, forms a source of some danger to any but active persons. The toilet compartments also, of which there is one on every car, leave much to be desired, and should likewise receive the attention of the railway management.

AUCKLAND.

Auckland, the largest town and commercial capital of New Zealand, is situated in latitude $36^{\circ} 50'$ S. longitude $174^{\circ} 50'$ E., on the southern shores of the Waitemata Harbour, one of the finest havens in the Colony, and itself an inlet of the Hauraki Gulf.

The town is built on a narrow neck of land between the bays of Waitemata and Manukau. The situation is a charming one. Facing the town are the green hills and white houses of North Shore, one of the most popular suburbs, and the volcanic island peaks of Rangitoto. Beyond are the many wooded islands of the Gulf, while to the southward, grouped on the sides of the low hills, are the villa residences of the townspeople, mostly built of weatherboards, partly perhaps on account of occasionally occurring earthquakes and partly by reason of the greater cheapness of that material in the Colony.

Auckland was named by Governor Hobson, who founded the city in 1840, after Lord Auckland, and was until 1864, when the seat of Government was removed to Wellington, the political capital of New Zealand. The city has an excellent commercial position, and there is railway communication with most of the centres of the North Island. The coastal steamers make it their terminus on nearly all the routes, while it is the objective of most oversea lines. Its distance from Sydney is 1,281 miles, and from Melbourne 1,641 miles. With both cities there is a regular steam communication, that to Sydney being the more frequent and direct.

In addition to Waitemata Harbour, the Manukau Harbour (6 miles across the narrow neck of land) on the western side of the North Island, affords excellent anchorage. There are no very serious engineering difficulties to surmount in cutting through this isthmus, and probably a few years will see a ships' canal connecting the two roadsteads.

The city is in telegraphic communication with all parts of New Zealand by means of three submarine cables laid in Cook's Strait. It is also the centre of the manufacturing enterprise of the Colony, and the industrial population is considerable.

Auckland is well laid out considering its hilly position, and wherever regularity was possible, the rectangular system of streets has been adopted. The streets are either flagged or asphalted, and the gas and water supply is adequate, the latter being drawn both from the Western Springs (condensed in reservoirs at Mount Eden), and from the Waitakerei

Ranges, the daily supply amounting to about 4,000,000 gallons. For municipal administration the city is divided into three wards, each returning three councillors elected by the ratepayers.

Area and Population. The area of the municipal borough is 1,772 acres, but the suburban area is of course much larger. According to census figures of 1901 the population of the city and suburbs was 67,226 (32,454 males, 34,772 females), that of the borough itself being 34,216. The most populous suburbs are Mount Eden, Parnell, Grey Lynne (Newtown), and Devenport. The increase for the decade was 15,939 or 31.08 per cent.

Climate. The climate of Auckland, mellowed as it is by the proximity of the sea on both sides, is of an equable and pleasant character and similar to that prevailing in Southern European States such as Northern Italy and the South of France. In 1902, the highest temperature in the shade was 79° 5 degrees Fahr. registered in the month of March, while in July the thermometer showed as low as 38.0 degrees Fahr. Snow seldom falls at the sea level in Auckland, but the summits of the adjacent hills are often snow clad during the winter months, while frosts are frequent at the same period. In 1902 there were 184 wet days on which 38.28 inches of rain fell.

Harbour. It is said that for beauty of surroundings and for general purposes, Auckland Harbour is only surpassed by Port Jackson (Sydney Harbour) and by the Harbour of Rio de Janeiro. The hills surrounding it, clothed with verdure and dotted with suburban residences, slope gently down to the waters edge, while picturesque islands and inlets stud its waters. The rounded hills on the North Shore are fortified. There is a sufficient depth of water for the largest steamer afloat, and at dead low tide any vessel can safely anchor or proceed right up to the wharves, the working ships channel having a depth of from 36 feet, and the wharves from 25 feet. The harbour has two good entrances for large vessels and is well lighted. The berthage accommodation is extensive, the largest wharf (Queen Street) having a length of 1,696 feet, while the railway wharf is 1,050 feet long. The former has facilities for the simultaneous loading and discharging of about 40 vessels ranging up to 50,000 tons burden. There are also two graving docks, both owned by the Auckland Harbour Board. The Calliope Dock has a floor length of 500 feet, and the Auckland Graving Dock a floor length of 300 feet.

Streets. The main thoroughfare of Auckland is Queen Street, which commences at the water's edge and runs directly through the centre of the city, having in it the principal banks, commercial houses and public buildings. Other commercial streets are, Durham Street, Fort Street, Victoria Street and Arcade, Customs Street on the shore of the harbour, Shortland, High and Hobson Streets.

Arrival. With deep water right up to the shore, the oversea traveller is landed almost in the centre of the city, whence a short drive only is necessary to the hotels and boarding houses, of which there are a number to choose from. Passengers by rail are also landed at the waterside, the central railway station having been built on land reclaimed from the harbour. Porters from the different hotels meet all steamers and trains, and baggage may be safely delivered into their charge.

Tramways. A system of electric tramways, owned by a private company, connects the city with the principal suburbs and with Onehunga. Sectional penny fares are in operation.

Public Vehicles. Vehicles plying for hire may be engaged at the following rates within a radius of three miles from the General Post Office:— Hansom cabs (one horse), 1/6 for first fifteen minutes, 2/— for half an hour, and 1/— for every subsequent fifteen minutes. Two horse carriage, 2/— for first fifteen minutes, 2/6 for half an hour, 4/— for three quarters of an hour, 5/— for one hour, and 1/3 for every subsequent fifteen minutes. Beyond the three mile radius but within a ten mile limit the respective fares are 5/— and 6/— per hour, and 1/3 and 1/6 for every additional fifteen minutes. Between the hours of 8 p. m. and 8 a. m., half additional fare is chargeable. Numerous buses ply between the city and those suburbs not served by tram.

Ferry Steamers. The North Shore, a populous residential suburb is connected with the city by means of a half hourly service of ferry steamers (return fare 6 d.) starting from near foot of Queen street.

Hotels and Boarding Houses. The following are the principal hotels of the city, all based on the American plan, and ranged according to their charges:— "Grand Hotel" 12/6 per day, "Star Hotel" 12/6 per day, "Central Hotel" 10/6 per day, "Royal Hotel", "Albert Hotel" 10/— per day, "Glenalvan House" 8/— per day, "Esplanade Hotel" 7/6 per day. There are besides a number of other hotels where lower charges prevail.

Those desiring cheaper accommodation may also avail themselves of one of the many boarding houses, where the tariff ranges from 4/6 to 7/— per day, and from about 25/— to 50/— per week; 35/— per week being a fair average charge for a good class boarding house.

Public Buildings. Among the chief public buildings of interest are the Government and Municipal Offices, Post and Telegraph Offices, Supreme Court, various banks and mercantile offices, all of a substantial character. The Government House stands in the midst of spacious grounds on the eminence near Albert Park. The Auckland University College is affiliated with the University of New Zealand.

Baths. Public baths, considered by some to be the finest in the Colonies, have been provided by the Corporation on the western side of the breakwater. There is also a bathhouse in Elliott Street, in the centre of the city, where fresh and salt water baths may be obtained.

Banks. There are five banks doing business in Auckland:— Bank of New Zealand, Bank of New South Wales, Bank of Australasia, Union Bank, National Bank of New Zealand, besides the Savings Bank. All Banks are situated in Queen Street.

Consulates. Austria, Hungary, Belguim, Denmark, Sweden and Norway, France, German Empire, Hawai, Italy, Netherlands, Portugal, United States.

Churches. The principal churches are:— Anglican — St. Pauls, Symonds Street; St. Matthew's Hobson Street; Holy Sepulchre, Khyber Pass Road; Church of Epiphany, Karangahape Road; Newton and All Saints, Ponsonby.

Roman Catholic:— St. Patrick's Cathedral, Windham Street; St. Benedicts, off Symond Street; Church of the Sacred Heart, and St. James, at the intersections of Pitt and Union Streets.

Presbyterian:— St. Andrew's, Symond's Street; St. James', Wellington Street; St. David's, Khyber Pass Road; and Stephen's, Ponsonby.

Wesleyan:— St. John's, Ponsonby Road, and a Wesleyan Church (with fine organ) in Pitt Street.

There is also a large Baptist Tabernacle in Upper Queen Street, and numerous other churches in different parts of the town.

Hospitals and Charitable Institutions. The Auckland Hospital (23 wards and 154 beds).

INTERSECTION OF QUEEN AND WELLESLEY STREETS, AUCKLAND
PUBLIC LIBRARY IN THE DISTANCE.

Other charitable institutions are: the Lunatic Asylum; a Lying-in Hospital; the St. Stephen's and St. Mary's Orphanages; the Costley Home for the aged Poor; the Costley Training Institute; the Jubilee Institution for the Blind, and an Industrial School.

Fire Brigades. The central fire station is located in Albert Street, where a lofty look-out tower commands the city and its environs, and there are branch stations at Ponsonby, Grafton, Newtown and elsewhere.

Press. Auckland has two daily papers, the "New Zealand Herald", (morning), and the "Evening Star", both 1 d. The weeklies, which are published at 6 d., are the "Auckland Weekly News", the "Observer", and the "New Zealand Graphic". Several monthly and other periodicals are devoted to special lines, such as agriculture and farming generally.

PLACES OF INTEREST AND AMUSEMENT.

The Museum, Princes Street, embraces besides numerous specimens of natural history, what is said to be the finest Maori collection in the world. Among the exhibits some carved native houses and an especially fine war canoe, 82 feet length with a greatest beam of 7 feet, are alone worth a visit. The Museum is open (free of charge) on weekdays from 10 a. m. to 5 p. m., and on Sundays from 2,30 p. m. to 5 p. m.

The Art Gallery is situated in the Municipal Buildings at the foot of Barrack Hill, almost in the centre of the town, and contains a fine collection of pictures bequeathed to the city by J. T. Mackelvie. There are also numerous other examples of art from the brush of local and foreign artists.

Libraries. The Free Public Library, contained in the same building, is one of the features of the city. It has both reference and lending branches, and possesses the famous collection of manuscripts, rare printed books, autographs and scarce and old works on New Zealand, presented to the city by the late Sir George Grey. The library, which contains 16,000 volumes, is well maintained by the corporation, and is open on weekdays from 10 a. m. to 10 p. m., and on Sundays from 2 to 5 p. m., and again from 7 to 9 p. m.

There is also a good library attached to the Auckland Institute.

Theatres. There are no theatres of any note in Auckland, but Abbot's "Opera House" in Wellesley Street, and "His Majesty's Theatre" in Queen Street are frequently occupied by touring companies, the best combinations visiting Australia often including New Zealand in their itinerary. Other halls used for public entertainments are the "City Hall" at the corner of Queen and Victoria Streets, the "Choral Hall" in Symond's Street, where frequent concerts are held, the "Foresters Hall", and "Temperance Hall".

Clubs. The Northern Club, Princes Street, and the Auckland Club.

Gardens etc. The Botanic Gardens and Albert Park are situated on Barrack Hill, almost in the centre of the city. There are several recreation grounds, including the Domain, which extends over about 180 acres, while the shores of the harbour and the islands scattered over it offer every attraction to picnic and camping parties.

DRIVES AND EXCURSIONS.

Mount Eden. A comprehensive panorama of Auckland and its environs may be obtained from the summit of Mount Eden, an extinct volcano some 640 feet high, and distant about three miles from the centre of the city. From the summit can be seen, besides the numerous suburbs, the Waitemata and Manukau Harbours on either side of the Island, and, beyond the former, the islands of the Hauraki Gulf, while, on a clear day, the bluff outlines of Great Barrier Island, 60 miles away, are also visible. The crater of Mount Eden, which resembles an amphitheatre, was formerly a "Pah" or Maori stronghold, the remains of the terraced fortifications being still plainly visible. In more modern days the crater has at times served for mass meetings of the populace, a purpose for which it is specially well adapted. Buses run from Queen Street to the foot of Mount Eden at infrequent intervals, fare 3d. each way; and the top of the hill may be reached by means of a carriage, a good driving road winding up to the summit. The drive can be extended by continuing to the suburbs of Epsom and Remuera, returning via Parnell or the Domain. Time required for this last mentioned trip 3 to 4 hours, or direct 2 hours.

Harbour Trips. There are numerous harbour resorts, and pleasant outings may be taken to Riverhead (the head of the harbour, steamer 1/— return), the extinct

volcano Rangitoto (854 feet), which is easily ascended, Turanga Creek (ostrich farm), and Motutapu, to all of which places excursion steamers are run during the summer months. On Motutapu Island there is a large herd of deer, and permission to shoot there is occasionally granted by the landlord. Fish are plentiful, and a small steam launch can always be hired for the day or the afternoon at a reasonable figure, either through Cook's office, or direct.

St. Heliers. A favorite seaside resort is St. Heliers, nine miles east of Auckland, which can be reached by bus, running four times daily (9 d. each way), or by steamer (35 minutes steam, 1/— return). There is good sea fishing and shooting in the vicinity.

Lake Takapuna, within easy drive by bus from Devonport, to which a ferry runs every half hour from Auckland, may be visited in an afternoon. At the "Lake Hotel" lunch can be had. There is also a fine view from the tower of the hotel. (Return fare from Auckland, steamer 6 d., bus 1/—). The view from Flagstaff Hill at Devonport is also very extensive.

Chelsea. The Chelsea Sugar Refineries, which may prove interesting to many, can also be reached by regular ferry boat.

ONE DAY TRIPS.

The Titirangi Ranges, and Nihotapu Falls, 18 miles distant, and the Waitakerei Falls and Cascades, 20 miles distant by rail, should also be visited. The scenery in that neighborhood is charming, and they are the nearest points to Auckland where the giant kauri (*dammara Australis*) may be seen. These magnificent trees do not occur south of Auckland, and tourists should therefore endeavor to visit one of the places mentioned. To the Titirangi Ranges and Nihotapu Falls the cost of buggy or wagonette seating 2 to 4 persons is from 30/— to 40/— including services of driver.

Waitakerei Falls. Fine forest scenery with giant tree ferns and waterfalls, of which latter the highest has a drop of 350 feet. Wagonette seating two to four persons 35/— to 40/—. Or by rail to Swanson, thence on horseback. (The latter trip is preferable and cheaper for a larger party, and is best arranged through Cook's office on the day previous).

Port Fitzroy, on Great Barrier Island, affords some bold scenery as well as one of the best fishing grounds in the neighborhood of Auckland, and may be visited with advantage by sportsmen who do not intend to go further afield. A steamer leaves Auckland every Wednesday night about 11 p. m., returning to Auckland in little more than 30 hours.

There are many other interesting places north of Auckland, but they do not in any way compare with the principal sights of the islands, and are therefore but rarely visited. They include the Bay of Islands, interesting from its many historical associations, the gum fields, and Whangarei, from where excursions may be made to the Wairua Fall, over 300 feet across, and the Kauri forest of Puhipuhi, where the largest known kauri tree in the district, estimated to exceed 5000 years in age, is to be seen.

Kamo, famous for its mineral springs, possessing valuable properties, especially for liver and kidney troubles, is also within 4 miles distance by rail from Whangarei.

There is a sanatorium and hotel at Kamo, the charge at the latter being 8/— per day.

HEALTH RESORTS.

The principal health resorts within easy distance of Auckland are in the order named, Te Aroha, Rotorua, Okoroire, Waiwera, Waingaro, Cambridge and others, but invalids and convalescents should obtain medical advice in Auckland as to the most suitable to their peculiar ailment. Cambridge has a splendid climate for chest complaints.

Te Aroha, situated at the foot of a mountain of that name on the Waihou (Thames) River, is one of the most favored of them all, both on account of its dry and salubrious climate (the mean annual temperature is 55° Fahr), and for its variety of hot and cold mineral springs — there are twenty one in number. The curative properties of these waters, of which there are four different kinds, viz: sulphur, magnesia, acidic and alkaline, have been found efficacious in the treatment of nervous disorders, rheumatism, skin diseases and other ailments, while the drinking spas are recommended in cases of liver and kidney troubles etc.

Te Aroha has the further advantage of possessing excellent accommodation at a more moderate cost than

is obtainable elsewhere in New Zealand. Boarding house charges range from 20/— per week upwards, while the tariff is 6/— per day, or 35/— per week at the "Grand", and 8/— per day at the "Hot Springs Hotel".

The baths are under the supervision of a resident medical officer; consultation fees, 7/6 and 10/6. The charges for the baths, both swimming and private vary from 4 d. to 1/— for single tickets, and from 3/— to 10/— per dozen.

There is a golf club at Te Aroha, and tennis and bowling courts in the Government Domain Grounds, while further recreation may be had by walks in the ranges, or boating on the Waihou River. There are also good roads for riding and driving.

Te Aroha is accessible either by rail direct from Auckland (115 miles), single tickets 12/6 and 8/—, return tickets 25/8 and 16/—, first and second class respectively, or by daily steamer to Thames (42 miles), about four hours' journey (vide Northern Co's Guide), 8/— single and 13/— return. From the Thames by rail to Te Aroha (33 miles), single tickets 4/3 and 2/10, return tickets 8/6 and 5/8 for first and second class respectively.

Excursion tickets for the round trip are issued throughout the year at 21/— first class, and 15/— second class.

The Thames ("Royal Hotel") is in the centre of the principal goldfields of the Colony, and many interesting side trips, also from a scenic point of view, can be undertaken from that centre. Among the places of interest in the neighborhood are:— The Kanaeranga Water Race, the "Big Pump and the Long Drive Tunnel", where some exceedingly rich finds were made. The Paeroa mining district, and the famous Martha (Waihi) Mine, the most important in New Zealand, are also situated between the Thames and Te Aroha, and accessible from both places. There are good cycling roads and sea fishing. A half holiday is held on Thursdays,

The Waiwera Hot Springs. Waiwera, a much favored health and seaside resort, is situated on the shore of the Hauraki Gulf about 24 miles from Auckland, the Maori name "Waiwera" i. e. hot water being obviously derived from the hot springs in the vicinity. There is an excellent hotel (charges 8/— per day or 50/— per week), and several boarding establishments. The mineral spa and baths are recommended for various complaints, and are much resorted to, ample opportunities for bathing being afforded by swimming baths for both sexes, measuring 12 feet by 18 feet, and a fine bathing pavilion containing 18 separate baths.

Boating, fishing, driving etc. add further to the attractions, and visitors to Auckland desiring a rest will do well in spending a few days at this pleasant seaside resort. Waiwera is accessible either by coach (7/— single, or 10/— return), or by steamer (5/— return. Vide daily papers).

Okoroire, situated at an altitude of 350 feet above sea level at a distance of 131 miles from Auckland on the Auckland—Rotorua line of railway, has a good hotel and natural hot baths, both enclosed and open. Trout fishing, quail and pheasant shooting may also be indulged in. The place can further be recommended for its invigorating climate, and should be an ideal spot for those desiring quietness and rest. "The Hot Springs Hotel" (tariff 10/— per day), lies about three miles from the railway station, whence visitors are conveyed to the hotel free of charge by a vehicle meeting all trains. The daily Auckland—Rotorua train, leaves Auckland at 10 a. m., arriving at Okoroire about 3.30 p. m. Single fares 14/2 and 8/8, return fares 28/4 and 12/4 for first and second class respectively.

Travellers desirous of breaking their journey at Okoroire en route for the geyser district, may avail themselves of the daily coach service between Okoroire and Rotorua, which affords an opportunity of seeing some fine bush scenery, or continue by rail.

SPECIMEN TOURS FROM AUCKLAND.

From Auckland to Thermal District and Back. (vide Rotorua).

I. Three Days' Tour.

First day:— Leave Auckland by 10 a. m. train (return fare 35/— first, and 20/8 second class), arrive Rotorua 5.50 p. m. Visit Sanatorium grounds and baths.

Second day:— Take so-called "Round trip" (25/— including guide's fees) to the buried village of Wairoa, Rotomahana Lake, the Waimangu Geyser and back.

Third day:— Leave by 7 a. m. or 9.30 a. m. train, arriving at Auckland at 2.30 p. m. or 5 p. m. respectively.
Actual cost £3 10/— to £ 5.

II. Four Days' Tour.

First day:— Train to Rotorua.

Second day:— By steamer via Hamurana Spring to Tikitere and back (fare 10/—, guide's fee at Tikitere 2/—).
Returning from Tikitere view sights of Whakarewarewa.

(Free on Government land, 1/6 toll on native land).
From Whakarewarewa walk to Rotorua (1½ miles),
or bus 6 d.

Third day:— "Round-Trip" to Waimangu Geyser.

Fourth day:— Return to Auckland.

Actual cost between £4 10/— and £6 10/—.

III. Six Days' Tour.

First day:— 10 a.m. per train to Rotorua.

Second day:— 8.30 a.m. per motor car to Taupo (56 miles return fare 40/—), arrive Taupo at 4 p.m. Visit Spa sights and Crow's Nest Geyser.

Third day:— By buggy (fare as per arrangement) to Wairakei, via Huka Falls and Karapiti Blow Hole. Visit Geyser Valley and Aratiatia Rapids.

Fourth day:— 9.30 a.m. return to Rotorua by coach or motor car, arrive Rotorua at 4 p.m.

Fifth day:— Round trip to Waimangu Geyser.

Sixth Day:— Return to Auckland.

Cost between £9 and £12.

A better opportunity of seeing the Waimangu Geyser in eruption is afforded if arrangements are made for a buggy or coach to meet motor car or coach at junction of Taupo and Waimangu Road on fourth day. Stay at Waimangu Rest House until next midday, then return by Lake Rotomahana, Wairoa etc. The additional cost would be from 10/— to £1 each, according to number.

The Waitomo Limestone Caves (Three Days' Trip).

Near Hangatiki (120 miles from Auckland) on the Auckland—Taumarunui line of railway. Take train (10 a.m.) to Hangatiki (return fare 26/6 first and 16/6 second class), thence on foot (5 miles). Rough accommodation can be found at a cottage at Hangatiki, where stretchers and hot water are available at a charge of 1/— per night. Rugs and food are not provided.

The Caves are also accessible on horseback from Otorohanga, the railway station before Hangatiki. Distance about ten or twelve miles.

ROUND TRIP.

Auckland via Wanganui River to Hot Lakes and Back to Auckland in Ten Days.

This is the most comprehensive tour in the North Island, including all the principal sights, and should be extended to at least two weeks if the time is available.

First day:— Take Friday morning's train (10 a. m. for Taumarunui, (single fare 17/10 first and 10/6 second class). Accommodation at two boarding houses and Messrs. Hatrick & Co's. houseboat.

Second day:— Launch leaves Taumarunui for Pipiriki every Saturday at 6.30 a. m., arriving at Pipiriki at 4 p. m. (fare 40/—). "Pipiriki Hotel", 12/— per day.

Third day:— Excursions in the neighborhood.

Fourth and Fifth days:— By coach (10 a. m.) via Waiouru (Hotel) to Tokaanu ("Blake's Hotel"). Fare 50/—.

Sixth day:— By steamer across the lake to Taupo (fare 15/—) and Spa sights. (The Spa, Terraces and Lake Hotels, all 10/— per day).

Seventh day:— Coach to Wairakei 5/— (or walk 6 miles), and Wairakei sights.

Eighth day:— Coach or motor to Rotorua 25/—. Excursions about Rotorua and Whakarewarewa.

Ninth day:— Round trip to Waimangu Geyser 25/—.

Tenth day:— Return to Auckland by train. 17/6 first, and 10/4 second class.

If the Waitomo Limestone Caves (see preceeding page) are desired to be included in the itinerary, another day is necessary, and in order to catch the weekly (Saturday) launch from Taumarunui, a start must be made from Auckland on Thursday.

ROTORUA.

Rotorua ("two lakes"), the most frequented health resort and the natural base for all excursions in the thermal district, offers the greatest number of attractions in its neighborhood, and travellers who have but a limited time at their disposal cannot therefore do better than to aim straight for this centre of the hot lakes district, where the health-giving climate and baths, and the many unique natural wonders are sure to be appreciated.

The township of Rotorua lies on the southern shore of the lake from which it derives its name some forty miles from the coast, at an elevation of 932 feet above sea level. The distance from Auckland is 171 miles by rail. The climate is more dry and bracing than that of the coast, although the large quantities of steam which ascend continuously, add considerably to the moisture of the atmosphere. The annual rainfall averages about 60 inches, while the mean temperature is 66° in summer and 45° in winter.

Rotorua, which is generally understood to include the adjoining township of Ohinemutu and the Maori village of Whakarewarewa, numbered 914 inhabitants at the last census (1901). It is laid out with broad streets, and lighted with electricity, and possesses, besides other public institutions, a Post and Telegraph Office, and branches of the Bank of New Zealand, the Government Tourist Department, and Cook's Tourist's Agency.

There is ample hotel and boarding house accommodation at charges varying from 30/— per week to 12/6 per day. The two best hotels are the "Grand hotel" in the centre of the town (one of the best hotels in the Colony), tariff 12/6 per day, and the "Geyser Hotel" at Whakarewarewa, 1½ miles from Rotorua, tariff 10/— per day, or £3 per week. Other hotels are the "Lake House Hotel" at Ohinemutu, (7 6 per day, £2.5.0 per week); "Brent's Bathgate House", (8/— per day, £2.2.0 per week), and the "Palace" and "Langham" Hotels, both 6/— per day, or 30/— per week.

Within a minute or two from the centre of the town is the Sanatorium Reserve, comprising about fifty acres in area, and containing the principal curative baths in the district, and indeed in New Zealand, some of which have in recent years been suitably fitted up for the convenience of invalids and visitors. Innumerable smaller springs riddle the shores of the lake beyond the Sanatorium as well as at Ohinemutu and Whakarewarewa, and everywhere issue white steam clouds, and a sulphurous smell is generally more or less noticeable. The springs, although within short distance of each other, vary considerably, not only in their temperatures, which range from 60° to 212°, but also in their chemical composition. Sir James Hector divides those which have so far been submitted to analysis into five classes: (1) saline, containing chiefly chloride of sodium; (2) alkaline, containing carbonates and bicarbonates of soda and potash; (3) alkaline-siliceous, containing much silicic acid, but changing rapidly on exposure to the atmosphere, and becoming alkaline; (4) hepatic, or sulphurous, characterised by the presence of sulphuretted hydrogen and sulphurous acid; and (5) acidic, containing an excess of sulphuric or hydrochloric acid, or both.

Among the principal springs which have been adapted as medicinal and pleasure baths are the "Blue Bath", a hot swimming bath fitted up with cold and hot showers, and the "Priest's Bath" and "Madame Rachel's Bath", in the main pavilion on the edge of the lake. This pavilion also contains the new "Ladies' Swimming Bath", the water of which

resembles that of the "Blue Bath". Other curative baths whose names are derived from the quality of their waters, or from their discoverers, are known as the "Postmaster's", "Hinemaru's" or Stonewall "Jackson's", "Corletts", "Saddler's", "Painkiller", "Coffee Pot", and other baths. The "Oil" and "Spout" baths are at Whakarewarewa.

"Te Pupunitanga" or "Priest's Bath", so called after Father Mahony, who was the first to discover its qualities, has the reputation of possessing the greatest medicinal value, and marvellous cures of rheumatism, gout, sciatica, skin diseases and various other ailments are recorded. The waters of this bath, which is strongly acidic and aluminous, varies in temperature between 98° and 106° Fahr.

The bath fees for visitors range from 6d. to 2,— for each bath, inclusive of one towel; commutation tickets from 10/— to 15/— for 25 tickets.

The Sanatorium charges are 30/— per week for ordinary patients and 21/— per week for members of friendly societies. Provision has also been made for recreation; and bowls, croquet, and tennis may be played in the Sanatorium Reserve on payment of a small fee (3d. to 6d.) for each game, or 10/6 for season ticket.

Evening entertainments in the shape of concerts or exhibitions of haka or poi dances by the Maoris are often given in the well kept Sanatorium Gardens, and on those occasions numerous Chinese lanterns render the grounds doubly attractive. A tea tent erected on one of the lawns, is a further recent and welcome addition.

Lake Rotorua, which has a depth of 84 feet, as well as other lakes and streams in the neighborhood, are of special interest to the angler as the best fishing ground in New Zealand (vide Sporting).

Ohinemutu. The native village of Ohinemutu on the southern shore of the lake can be reached from the centre of the town after fifteen minutes' walking, or by bus 6d. Here the carved house, Tama-te-kapua (the largest native meeting house in New Zealand), which was rebuilt in 1904, and a bust of Queen Victoria, standing under a curiously carved wooded canopy, claim the attention of the visitor. The manner of cooking food in the natural boiling springs may also be observed everywhere.

At the time of the visit of their Royal Highnesses the Duke and Duchess of York to Rotorua (1901), they were received at this spot by some two or three thousand Maoris, and presented among other gifts with "Onepatupounamu",

an ancestral greenstone weapon of the Ngaitahu tribe, by the descendants of Hinemoa and Tutanekai. (Vide Hinemoa legend). From a hill above the village a good panoramic view may be had. Enclosed baths, supplied from the hot springs, are provided by the "Lake House Hotel" for the use of visitors.

Whakarewarewa. In the immediate neighborhood of Rotorua the thermal phenomena are best represented at Whakarewarewa, or Whaka, at it is generally called (1½ miles). A good road, suitable for pedestrians or cyclists, leads to the village, and buses (6d each way) run at frequent intervals.

The best sights at Whakarewarewa are on the Government Reserve, where no charge is made. On native land there is a toll of 1/6. Native guides are obtainable if required, Maggie Papakura, and Sophia, the famous guides of the Pink and White Terraces, being most in demand, their interesting accounts of legendary lore and stories of the eruption of 1886 adding greatly to the interest of the visit.

The following are among the most noted objects of interest at Whakarewarewa:— The Pohutu Geyser, which, at irregular intervals, shoots up a column of boiling water to a height of up to 100 feet. Te Horo ("the cauldron"), an open well of boiling water some 15 feet in diameter, which boils up furiously before each eruption of the Pohutu. Te Kereru ("pigeon"), below the Pohutu on a ledge of rocks near the creek, plays at intervals of about eight hours, and is heralded by the increased activity of what is known as the "Torpedo", in the bed of the creek, from its resemblance to the explosion of a submarine mine on a small scale. The Wairoa Geyser ("high water") plays very rarely, but an artificial display is often produced by the process of "soaping", which is now sanctioned only on special occasions. The Waikite Geyser, formerly one of the finest in the district, has been silent for some years.

Te Komutumutu ("the brain pot"), a low eruption cone standing on a terrace, has an interesting history. The legend says that long ago Te Tukutuku, an old chief, hid for two years from his enemies in a cave near Waikite. When finally discovered, he was killed and his brains cooked in Te Komutumutu, and eaten.

Numerous other boiling pools, mud volcanoes etc. are also found in all parts of the valley.

Of interest is also a recently constructed Maori Pah and a particularly fine carved whare (house), with which many old legends were connected. This house was built by Te Waru, an old Arawa chief, who, while the building

was still in progress, committed a breach of the "Tapu" by entering the house with his pipe alight. The old chief was then warned by a Tohunga not to proceed with the construction as seven lives would pay the penalty if the house were completed. The house was however finished, and, after the fifth death had occurred in the chief's household, sold to the proprietor of the "Geyser Hotel". Since then two other Tohungas connected with the opening ceremony died shortly afterwards, and the prophesy is thus considered to be fulfilled by the natives.

SIDE TRIPS FROM ROTORUA.

The culminating attractions in the Hot Lake District are of course the great Waimangu Geyser, and the Wairakei Geyser Valley. But the chain of lakes stretching to the south and eastward of Rotorua, afford many opportunities for excursions, especially Lake Rotorua and Rotoiti, on which several steamboats ply regularly between the different points of interest.

Mokola. The wooded island of Mokoia, rising to a height of 528 feet in the centre of the lake, about three miles from the shore, is of historic and legendary interest. On it were kept the sacred emblems and treasures of the tribe, brought by them from their legendary home in Hawaiki. Even to this day a certain relic of some significance, alleged to have been brought to the country by the first Maoris, is treasured there. The island was also — in the early part of the nineteenth century — the scene of the massacre of the remnant of the Arawa tribe, who, thinking themselves secure in the centre of the lake, had taken refuge there after their chief Hinaki and a thousand of his warriors had been killed by Hongi.*) On being apprised of their retreat, this indomitable chief dragged his war canoes thirty miles overland from the Bay of Plenty, launched them on Lake Rotoiti, and thus proceeding to Lake Rotorua, utterly exterminated his unlucky foes, who are said to have numbered 5,000.

But perhaps the most noted feature of Mokoia is the Waikimihia Spring, or Hinemoa's Bath, so called after that Maori maiden who is the heroine of one of the most widely known native legends. According to the story, which bears a resemblance to the classic legend of Hero

*) See also „History“.

and Leander, there once lived at Owkata (Wakarewarewa), Umukaria, the chief of the tribe, whose daughter Hinemoa was of such rare beauty that her fame had spread throughout the land, and she was much sought after by all the young chieftains. Among her many wooers was Tutanekai, the son of Tuwharetoa, though his mother was the wife of Whakane Kaipapa, the chief of Mokoia. His birth-stain stamping him as a commoner, Tutanekai was not a welcome suitor to Hinemoa's father, and when it transpired that her choice had fallen upon him, Umukaria's rage knew no bounds. He dared Tutanekai to set foot on his shores again, and fearing that Hinemoa might join her lover on the island, caused all canoes to be hauled far up on the beach. Every evening the strains of Tutanekai's lute were wafted across to the shore, until Hinemoa could no longer resist the impulse of her heart and resolved to brave the deep waters of the lake. Taking with her six empty gourds as a support, she started on her perilous journey and guided by the sounds of Tutanekai's lute, finally reached the island, emerging at the spot where the Waikimihia Spring wells up near the beach. Almost numbed with the long swim, Hinemoa gladly entered the warm well, which soon restored her strength. Finding an opportunity to communicate with Tutanekai, they became united, and henceforth lived in peace on the island. Their descendants still dwell on the shores of Lake Rotorua and still tell of the wonderful feat of their ancestress, which has been immortalized in poem and song.

Mokoia is visited by frequent daily steamers. Return fare 5/—. Landing toll 6 d.

Hamurana. At Hamurana, on the northern shore of Lake Rotorua, a chasm in the rock wells forth an enormous body of clear, cold water, which, winding through picturesque groves of willow and other trees, a landscape unique in this region of fire and desolation, empties itself into Lake Rotorua. The flow of the spring is estimated at 500,000 gallons per hour. Remarkable is further the fine coloring of the weeds and mosses, which grow so prolifically as to obstruct the passage of the rowing boat on its way to the spring.

A legend connected with Hamurana tells of a great lizard, who, on being pursued by the Maoris, disappeared into the stream at this spot, burrowing a deep hole as a refuge, and so gave rise to the copious spring. Little fish, a few inches in length, which are sometimes seen near this spot, are supposed to be the descendants of the lizard.

Daily steamers to Hamurana 5/— return. Round trip by steamer and coach, to Hamurana, Te Ngae, Tikitere and back, 10/—.

Tikitere, sometimes called the devil's acre, a centre of great thermal activity, is situated between the Lakes Rotorua and Rotoiti, some ten miles by coach from Rotorua. There are no geysers in the usually accepted term of the word to be found here, but a series of large and violently boiling cauldrons, fumaroles, and mud volcanoes, spluttering seething black slime to the height of a few feet, and exceeding those of Whakarewarewa both in size and fierceness of action, make this place worth a visit. These sights being on Maori land, a fee of 2/— per head is levied here, which includes the service of a guide. Light refreshments can also be obtained at reasonable charges at the house of Lusi Ratema, the young Maori guide.

A walk of three quarters of a mile over fern-covered hills and heavily timbered bush land, brings the tourist to Rotokawau ("cormorant lake"), an idyllic crater lake of a delicate bluish-green tint, nestling among precipitous, wooded hills, several hundred feet in height, and offering a pleasing contrast after the turmoil of Tikitere.

Tikitere can be reached by coach all the way, or by steamer via Hamurana to Te Ngae, thence by coach. Return fare in both instances 10/—.

Rotoiti, Rotoehu and Rotoma Lakes. Rotoiti ("little lake") lies to the eastward of Lake Rotorua, with which it is connected by the serpentine Ohau channel. The lake is much indented, and, being surrounded by hills, offers many picturesque points, especially on its precipitous eastern shores, which are clothed with luxuriant verdure to the water's edge. At the extreme east of the lake, the Maori village Tapuwaeharuru, lying at the foot of the dark cone of the Matawhaura (1806 feet), and a sulphur spring of valuable properties on the southern shore of the lake, are generally visited. A landing toll of 2/6 is levied by the natives. From Tapuwaeharuru the trip can be further extended to include the Lakes of Rotoehu and Rotoma, which latter, though the least accessible, is generally considered the most beautiful. At the Waitangi ford, between Rotoehu and Rotoma, there is a soda water spring, as well as a fountain of chalybeate water. Rotoiti has a depth of 228 feet.

Fares to head of Lake Rotoiti (20 m.) 10'— return by coach or steamer.

Okere and Tuatea Falls. The Okere Falls (13 miles), near Lake Rotoiti, which supply the electric power for Rotorua, also furnish the object for an interesting side trip. Below the Power House, which rather spoils the picturesque effect of the rapids, a road leads to a point overlooking a deep, wooded canyon, where the waters of the swiftly rushing river leap from a narrow chasm, forming the Tuatea ("giant") Falls, which can be more closely viewed from the bottom of the steep track on the right. At another part of the river, a little more than a mile from here, there is a third fall called Korua ("old man"). This spot is especially attractive to anglers, some fine catches of heavy trout having been recorded here at different times.

Means of access by coach. Fare 10/— return.

The Waimangu Geyser ("black water"). This geyser, situated within a short distance of Lake Rotomahana, and said to be the greatest in the world, is one of the most recent thermal developments in the district, as well as the most wonderful. It was first discovered in 1900 by local tourists, who observed a dense column of steam from Waiotapu Valley, a distance of some eight miles from the geyser, and it has since been continuously active. The eruptions vary in character between upheavals of black boiling mud, and volcanic explosions of ashes, earth and stones, and often attain an enormous height. The highest shot yet observed was estimated at 1,500 feet, while the dense white cloud of steam following an explosion is often hurled to a height of many thousand feet. The intervals between the eruptions vary in length, but it is rarely that the geyser remains quiescent for more than thirty six hours.*)

There is nothing in the thermal district in any way to compare in grandeur and awesomeness with one of these terrific but magnificent displays, and visitors should, if possible, endeavor to devote a longer time to the Waimangu, than provided by the "Round Trip", which affords but a slender chance of viewing an eruption. The appearance of Waimangu, when inactive, is that of a harmless sheet of steaming, black water, about 250 feet in diameter, at the

*) On the morning previous to the writer's visit to Waimangu, in April 1904, an outburst estimated at 1,200 feet had occurred, which, it was said, considerably lessened the chances of witnessing another great eruption on the following day. Thirty hours after that phenomenal outburst however, the geyser again showed signs of activity, and several wave-like upheavals of black mud, reaching heights of between 30 and 80 feet occurred at short intervals, followed during the night — it was bright moonlight — by three greater outbursts varying between about 200 and 500 feet.

bottom of a crater, open on the side facing the accommodation house, and it is difficult to believe that this apparently innocent pool could suddenly belch forth vast quantities of mud and stones. In the same crater, beside the actual geyser, is a larger boiling pool known as the Echo Crater Lake, which by overflowing is said to indicate an impending outburst. A flat surface on the open side of the crater is in a continual state of frizzle and termed appropriately the "Devil's Frying Pan". On the highest point of the crater wall stands a small shelter shed from where there is a fine view of the boiling pool below, and of the surrounding country. To the northward, the cleft sides of Mount Tarawera slope down towards Lake Rotomahana, and to the south the snow cap of the Ruapehu can be distinguished on a clear day.

That great caution is necessary when visiting the geyser was shown in August 1903, when several tourists, including two young ladies, who had ventured too near the eruption centre were swept away and scalded to death by the overflow. The line of danger has since been marked by a fence. On another occasion the geyser pool was crossed by two men (one a guide) in a boat, and, although the foolhardy feat was successfully accomplished, they were near to being suffocated by the steam.

A comfortable Government accommodation house has been erected on a hill at a distance of about three quarters of a mile from the geyser basin, which it overlooks. There is a telephone connection with Rotorua, and rooms may be arranged for beforehand if necessary. The tariff is 2/6 all round, or 10/— per day for first week, and 8/— per day for every successive day. Means of access from Rotorua by daily coach leaving Rotorua at 8 a. m. Return fare 10/—, single 7/6.

"The Round Trip": Rotorua—Waimangu. Coach leaves Rotorua daily at 7.30 a. m. for the buried village of Wairoa (10 miles), which was destroyed by the eruption of Mount Tarawera in June 1886. From Wairoa across Lake Tarawera by boat (6 miles), thence a one-mile walk to Lake Rotomahana, thence by boat past the site of the Pink and White Terraces and through boiling water to end of lake (3 miles), thence on foot to Waimangu (2 miles), arriving about 2 p. m. From Waimangu coach departs at 3.30 p. m. for Rotorua (17 miles) arriving about 6 p. m. The trip may be made vice versa, but is not undertaken unless there are four or more passengers. The fare is 25/— including guides' fees.

AN ERUPTION OF THE WAIMANGU GEYSER
SHOT APPROXIMATELY 500 FEET HIGH



73

SPECIMEN TOUR.

From Rotorua to Taupo via Waiotapu (56 miles).

This trip can be made either by coach, which leaves Rotorua daily during the summer months at 7.30 a. m., arriving at Taupo at 5. p. m., or by motor-car leaving an hour later. The latter is of course the most expeditious mode of travelling, though in fine weather a box seat on the slower travelling coach offers better opportunities for viewing the scenery, and is therefore preferable. During the winter season — from 1st of May to 31st of October — coaches and motor cars only run on Tuesdays, Thursdays and Saturdays, the former leaving Rotorua at 7 a. m., the latter at 8.30 a. m. The fare in either case is 25/— single, and 40/— return.

The road runs through Whakarewarewa, and, after ascending the hills which fringe the lake, takes a turn to the left (the road to the right also leads to Taupo via Ateamuri). The scenery retains a somewhat monotonous character until the Waimangu road, which again branches off to the left, has been passed after about fifteen miles travelling. The scenery then becomes most interesting, and affords many varied and picturesque glimpses. On the left hand side a most remarkable volcano of many hues and colors, the Maunga Karamea (2,500 feet), is passed, smoke issuing from two craters on its side. Near the road, at the base of the mountain, there lies Ngahewa, a green lake, smoking in parts; and a wonderful pool of azure blue is said to form the bottom of the higher but smaller crater. Shortly before reaching the green lake, a small stream is passed in which numerous trout can be distinctly seen, even from the moving vehicle. To the right there is the volcano Maunga Ongaonga (2,764 feet), with numerous lakelets at its base and sides, one of which is of a deep crimson tint.

Among other curiosities by the roadside, the "Porridge Pot", a conical mud volcano about 15 feet in height, and the pretty sulphur terraces can easily be visited. The Porridge Pot, which can be ascended by means of a wooden ladder, is filled to the very rim with a spluttering mass of oily boiling mud, the bubbles in bursting forming rose-like patterns on the surface.

At "Waiotapu Hotel" (21 miles), where the motor car is due at 11 a. m. (vide Waiotapu), a break of 1½ hours is made and a good lunch provided for 2/6. After a further run of 1½ hours Wairakei (see under that heading) is reached, where fifteen minutes are allowed for afternoon tea. The Karapiti Blow Hole (see Wairakei) is passed at a distance, but cannot be visited unless the traveller chooses

to engage a separate vehicle at Wairakei to continue the journey in. But a fine view is obtained en route of the marvellous Huka Falls, (vide Wairakei) which alone make the trip worth while. From this point a further run of about three miles brings the journey to a conclusion at Taupo, where the motor car is due at 4 p. m., an hour before the arrival of the coach.

WAIOTAPU.

The Waiotapu Valley — a distance of twenty-one miles from Rotorua, on the Taupo road — contains a large number of thermal phenomena, partly resembling those of Tikitere, and partly showing entirely new features. Among the latter are the "Champagne Pool", which strongly effervesces when a quantity of pumice dust — plentifully lying about, is thrown into it, the "Porridge Pot", a mud volcano 15 feet in height, alum cliffs, and a variety of pretty sulphur terraces. A side trip to the boiling Waikiti River can also be made from here. Most of these sights are on native land, and a toll of 2/6 per head is levied, which includes the guiding. There is a good hotel at the roadside, a short distance from the principal sights. The tariff is 2/6 per meal, or 10/— per day. The tour can be made in one day. Return coach fare 10/— direct, 15/— via Waimangu.

WAIRAKEI.

Wairakei ("sparkling water"), lying at an elevation of 1,350 feet, on the Rotorua-Taupo road, at a distance of 50 miles from the former, and 6 miles from the latter place, may be said to form the centre of the southern portion of the thermal district.

With the unique Geyser Valley as its chief attraction, it is favorably situated for excursions to the Karapiti Blow Hole, the Aratiatia Rapids, the Huka Falls and other sights. There is some shooting and fishing to be had in the neighborhood, while its invigorating climate and easy facilities for bathing in the hot and cold streams flowing side by side through the hotel grounds, make it also valuable as a health resort. The hotel consists of several small cottages and a number of canvas tents scattered among the shrubberies of an extensive garden. A Post Office and telephone is also connected with the hotel. It would appear from the presence of the tents in the hotel grounds that accommodation is at times very inadequate, and intending visitors would therefore do well to secure rooms by telephone.

The charge at this hotel ("Geyser House") — the only one in the neighborhood, — is 10/— per day, but cheaper arrangements can be made for a longer stay.

The Geyser Valley, to which the visitor will be conducted by Mr. Ingles, better known as "Bob the Guide", is reached after a walk of about a mile from the hotel. Mr. Ingles is well versed in these underground phenomena, and though some of his theories may be questionable, his enlightening explanations and demonstrations of geyser action, — on a small scale — are not the least interesting feature of the visit. By continuing along the main path through the manuka scrub, above which dense columns of steam can be seen ascending, the most prominent sights are reached in the following order:—

The Tuhuatahi or Champagne Cauldron. This is a furiously boiling pool of the clearest green water, measuring 60 by 80 feet in diameter, and blown from the rocky hill-side above the creek, which receives its overflow; a perpendicular cliff of about 60 feet in height forming the background. The pool, which is said to have a depth of 83 feet, is in a constant state of effervescence and turbulent uproar, intermittently throwing up its waters en masse to a height of from six to eight feet.

The Great Wairakei, which is considered the feature of the valley, is next in order. The seething waters in its triangular crater — twenty feet in depth, is always in a state of commotion, eruptions of varying force occurring at intervals of eight minutes. These marvellous outbursts, which are of about four minutes' duration, occasionally reach a height of 40 feet. Near the Little Wairakei and the Packhorse Mud Geyser, which was started into activity by a packhorse slipping into a boiling mud hole, the stream is crossed. Continuing the path on the north bank, the Fairy Baths, little, hot and colored pools, are passed, and a series of new wonders reached.

The Dragon's Mouth, a very energetic geyser, derives its name from the supposed resemblance of its crater to the mouth of such a mythical monster, and indeed, not only the curiously shaped funnel, but also the bright red color of what might be its upper jaw and throat, not to speak of the white steam continually emitted, favors the illusion. The Dragon's Mouth "plays" at intervals of nine minutes, throwing up fountains of water to a height of up to ten feet. Visitors are often led through the caverns of this geyser during the short period of its passive interval; a seemingly foolhardy though really harmless adventure.

The Lightning Pool, on the hill slope below the Dragon's Mouth, is a circular basin of clear boiling water, from the depths of which a large luminous bubble shoots up at intervals. By inserting a stick, the great force of the explosion can be distinctly felt.

The Donkey Engine, a geyser near the bed of the creek, regularly ejects jets of steam with great force accompanied by a noise resembling the thuds of a steam engine.

The Black Geyser plays every 35 seconds from a jet black basin near by, where there are also a number of other boiling basins of clear, and milky water.

The Heron's Nest, a small geyser of irregular action, is on the opposite bank of the creek. Retracing one's steps but keeping to the path on the northern bank, a blue lakelet and numerous mud craters are passed, and a very active cluster of geysers reached.

The Eagle's Nest, so called from the quantity of dead manuka bushes and trees uprooted in its outburst and since collected over its crater in the form of a huge nest, plays at irregular intervals (formerly every two hours), gradually incrusting the boughs with a deposit of snow-white crystals.

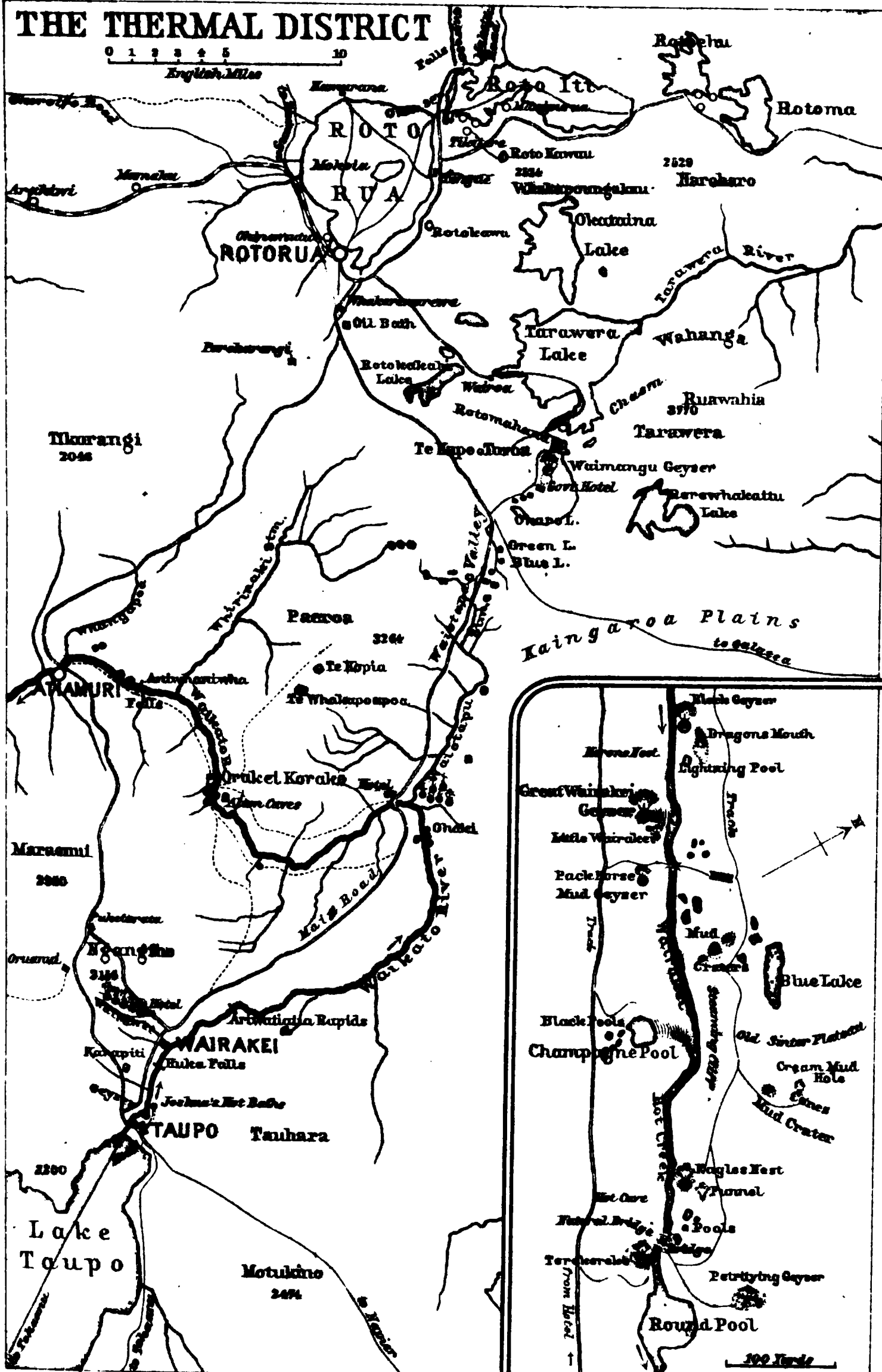
Following the track on the terrace, the "Funnel", "Boiler" and "Whistler", all active geysers, come into view, as well as the more notable "Nga Mahanga" and "Prince of Wales" Feathers".

The Prince of Wales' Feathers afford one of the most picturesque displays in the valley, watery plumes, between twenty five and fifty feet in height, being ejected at regular intervals from an aperture of no more than about twelve inches in diameter. As no warning precedes these outbursts, this part of the terrace especially should never be approached without a guide.

Nga Mahanga ("twins") plays every four minutes from a large oblong basin a few feet above the creek bed. The basin was formerly divided into two separate parts by a sponge-like rock which produced the effect of two geysers playing one after the other.

The Petrifying Geyser, which is forming pink terraces on a small scale, is situated a little higher up on the hillside. Every twenty five minutes, an outburst of

THE THERMAL DISTRICT



The Wairakei Geyser Valley

Wilh^m Jöntzen Bremen

sparkling spray occurs, preceded by the rising of the water in the crater, and a roaring noise. Below the geyser there is a pool formed by the creek, whence heavy thuds issue at regular intervals. This is known as the "Steam Hammer".

Before ascending the path which joins the main track leading back to the hotel, the Te Rekereke is passed. This is a ceaselessly boiling pool close to the creek bed, which frequently throws up a mass of water to a height of from five to ten feet. As the sights are on the hotel property, a charge of 4/— for each person is made for the first visit to the Geyser Valley, which includes guiding. Subsequent visits are free to hotel boarders.

EXCURSIONS FROM WAIRAKEI.

Orakei-Korako, an extensive thermal centre on the banks of the Waikato, sixteen miles from Wairakei, offers some unique sights. Chief among these are some wonderful alum caves which are certainly worth a visit. The return fare from Wairakei is 15/—. Orakei-Korako is also accessible from Ateamuri and Waiotapu.

Aratiatia Rapids. Some five miles below Wairakei the Waikato River drops 210 feet in the short space of half a mile, the madly rushing torrent being at this point again compressed into a narrow channel of about fifty feet in width, through which the seething mass thunders furiously. A fine view can be obtained from a projecting rock at the lower end of the rapids. The return fare (per buggy) is 5/—.

Wairoa Valley contains, beside other attractions, a number of lakelets of different hues. Return fare 3/—. Means of access to Wairakei by coach or motor car, 22/6 single, 40/— return. For particulars vide tour: Rotorua-Taupo.

Karapiti, a wonderful blow hole about three miles from Wairakei, periodically ejects a vast volume of steam with a roaring noise. This fumarole, which blows off the steam with a force of 180 lbs. to the square inch from an orifice about twelve inches in diameter, has been called the "Safety Valve of New Zealand". Return buggy fare 3/—.

Karapiti can also be visited on the way to the Huka Falls and Lake Taupo.

The Huka ("Snow-Water") Fall and Cataract. The Huka Fall (3 miles) which is remarkable for its terrific

force and great volume of water rather than for its height, is one of the most impressive sights of the North Island. It is formed by the Waikato River, which from an average width of about three hundred feet, is suddenly compressed into a deep chasm about a thousand feet in length and fifty feet wide. During its furious rush through this narrow gorge, the river experiences a drop of altogether 79 feet, of which the last grand leap of forty feet constitutes the fall proper. The force of the fall is, according to the report of an expert, 39,000 horse-power. Words are however inadequate to convey an idea of the enormous power and beauty of this wonderful mass of seething water, which is well described by Miss Terry, a lady traveller, as follows:—

"Continuing on our way, we passed along the banks of Waikato River — at one point looking down on the stream three hundred feet below — and soon came in sight of the far-famed Huka Falls. Here the Waikato — after emerging from Lake Taupo and flowing in a broad stream, is suddenly forced to make its way through a narrow rocky canyon, about a quarter of a mile in length. Through this imprisoning chasm, the whirling, foaming waters fling their impetuous way with tremendous velocity, until, with a thunderous roar, they hurl themselves as from the neck of a great bottle, over a precipice at the end of the canyon — a mass of quivering spray, color and brightness. Some fifty feet below, the glimmering sheet of water falls into a broad tree and rock-fringed pool, where the waters whirl and eddy in impotent frenzy, until, a short distance further on, they merge again into the swift, calm current of the river.

A legend connected with these falls, tells that long ago, seventy natives from Wanganui, headed by their chief Tamatea Pokaiwhenua, paid a visit to the tribe at Taupo, and Maori-like, commenced to boast of their skill in shooting their own wonderful rapids. Whereupon the Taupo people suggested that the Wanganui chief with his men and a Taupo guide, should set out in a large war canoe to test the truth of his assertion. Accordingly the Wanganui natives started off, safely directing the canoe over the first small rapids; whilst the Taupo Maoris ran along the bank to view their vaunted skill. Suddenly, at a sharp bend in the river, they came to the mouth of the Canyon, and the guide, with a derisive shout, leapt into one of the boulders, leaving the hapless canoe and her crew to be whirled to their doom by the seething waters."

A narrow suspension bridge connects the two banks of the canyon, affording an opportunity for crossing the

cataract. But the best view of the fall is gained from a rocky shelf on the western side of the basin.

The Huka Falls and Cataract are included in the Wairakei Hotel Estate, which comprises 4,200 acres of freehold. The property was acquired before the passing of the Thermal Springs Act, which prohibits the purchase of territory (by Europeans) in the thermal area. The return fare by buggy from Wairakei is 3/—. These sights can also be visited on the way to Lake Taupo (6 miles), return fare 5/—.

TAUPO.

Taupo, the Samoan title for unmarried princesses, which has here been translated as meaning "a resting place during darkness", and by others is said to have been derived from "Tapu-wae-haruru" ("the place of sounding footsteps"), on account of the hollow sounding pumice plain on which it lies, is a small settlement on the shores of the lake of the same name. The little place is of historical interest as a centre of the Maori conflict at the end of the sixties, but offers many other attractions.

Taupo has a dry and pleasant climate, and it will no doubt acquire a reputation as a health resort, when it becomes more easily accessible. Of the three hotels at Taupo, the "Spa" and the "Terraces" (dark room for photographers) are situated at an elevation some distance from the settlement. "The Lake Hotel" is in the township itself. The tariff in each case is 10/— per day.

The Spa sights (near "Spa Hotel", include the Witch's Cauldron, Paddle Wheel Ben, etc., with the Crows Nest as a culminating feature. From a great nest-like structure, built up by sinter deposits, this remarkable geyser throws up jets of water varying in height from 30 to 100 feet, at an angle of about 60 degrees.

The Black Terrace, in a deep gully near the "Terraces Hotel", is a curious dark tinted sinter slope, caused by an admixture of iron with the silica of the hot springs, whose waters flow over the terraced formation in numerous little cascades. Here is also Onekeneke, a pretty, hot lake. Excursions can also be made from Taupo, to Rotokawa ("bitter lake"), distant about ten miles, where there are great sulphur deposits among the seething and spluttering cauldrons, boiling springs and other phenomena. (Ducks

are numerous on the lake). The eastern shores of the Aratiatia Rapids and the Huka Falls are also easily accessible, while for more extensive tours and explorations, the shores of Lake Taupo offer an unlimited scope. To the southward of the lake, which is encompassed by mountain ranges, can be seen the majestic and picturesque group of snow-capped smoking volcanoes known as the Tongariro Group, the principal cones of which are the Ruapehu (9,008 feet), and the Ngauruhoe (7,515 feet). These mountains can be ascended from Tokaanu without much hardship, and are certainly worth the exertion of a visit.

Lake Taupo, called by the Maoris "Te Moana" ("ocean"), lies 1,250 feet above sea level, and measures about 25 by 16 miles, with a total area of 241 square miles. Its greatest depth is 534 feet. There are two islands in the lake, Motu Whara and Motu Taiko, which latter rises to a height of about 400 feet near the centre of the lake. In ancient days this last named island was a fortified stronghold of the Ngatituwharetoa tribe, but for centuries its rocky caves have been used as a tribal burying ground. Near here is a long reef, under which, in a dark cave, Moromatangi, a monster to whom all misfortunes of the lake are attributed, is supposed to dwell. (Similar superstitions, varying little from this Maori version of the Taniwha, are common in the Polynesian Islands).

Another legend is connected with the Karangahape Bluff, which rises perpendicularly to a height of 1,200 feet on the western shore of the lake, where, it is said, a chief named Tamatea turned his dogs into stone and left them as perpetual guardians of the deep.

There is a daily steamer service between Taupo and Tokaanu, a Maori village on the southern shores of the lake (Blake's Hotel 10/— per day), where there are numerous hot springs and baths. Some good shooting is also to be had in the neighborhood. The fare to Tokaanu is 15/— single, and 25/— return. Taupo can be reached from Auckland via Rotorua in two days (see Rotorua-Taupo Tour). From Napier by coach (100 miles, fare 50/—) in two days.

NAPIER.

Napier, the chief town and port of the pastoral and agricultural district of Hawke's Bay, is situated on a rocky peninsula named Scinde Island, and commands a fine view of the Bay. It has a population of about 9,500 and is of

considerable commercial importance. During the year ending June 1903, the imports amounted in value to £214,886, and the exports to £971,599. The climate, especially in winter, is mild and fairly dry, the average annual rainfall being about 38 inches.

Napier is best reached from Auckland by sea (371 miles, fare 45/— single, 75/— return), steamers running at frequent intervals. With Wellington (199 miles) there is railway communication, the journey occupying 11 hours and twenty minutes. Fare 19/10 first class, and 11/6 second class.

The town is well lit with gas, and has a good water supply, derived from artesian wells and pumped into reservoirs at the top of the hill. The residential area is on the high ground immediately above the town. Of interest are the Breakwater, which was built at a great cost but has proved of little use; the Freezing Works, and the Woollen Factory. Some of the largest sheep stations in the district are also within easy distance of the town.

The hotels are the "Masonic", 10/6 per day (an excellent hotel), and the "Criterion" 10/— per day.

Lake Waikaremoana ("sea of rippling waters") is a picturesque lake in the Hawke's Bay District. It has a length of 11 and a greatest breadth of about 8 miles and offers, besides its scenic attractions, some good trout fishing. The lake is at present somewhat inaccessible, the only driving road leading to it being that from Wairoa between Gisborne and Napier. The Government have recently built an accommodation house, which, standing on a headland, commands fine views of the surrounding scenery. The tariff there is 10/— per day (8/— after the first seven days), or 2'6 for meals or bed. There is an oil launch available at the accommodation house, in which different tours may be made at charges varying from 2/— to 10/— for each person. Boats can also be hired at the rate of 1/— per hour, or 5/— per day. Means of access:— Coach leaves Napier for Wairoa (84 miles), every Tuesday at 6.30 a. m., and arrives at Wairoa at noon on Wednesday. Fare 30/— single, 50/— return. Or, by steamer from Napier to Wairoa (40 miles), every Thursday and Friday. Fare 7/6 single, and 12/6 return. From Wairoa, coach departs for Waikaremoana (42 miles) every Monday and Thursday at 8 a. m., arriving at the lake at 5 p. m.

The lake is also accessible from Rotorua through the Urewera country (100 miles), but as 43 miles of this track are of a very rough nature, traversable only on foot, this route cannot be recommended.

THE WANGANUI RIVER.

For scenic effects, the Wanganui River, which has been termed the "New Zealand Rhine", is the show-piece of the North Island, and it is especially in its narrow "upper reaches" where the full measure of nature's lavishness is exhibited. Commencing as a snow-fed streamlet, it becomes navigable for canoes and small steam launches at Taumarunui, where it receives its principal tributary, the Ongaruhe, at a distance of 144 miles from its confluence with the South Taranaki Bight. For the greater part of this distance the river is shut in by high precipitous hills, covered with luxuriant forest vegetation down to the very water's edge, and varied by bare, perpendicular walls of rock on which only lichens and climbing ferns can find a foothold. The river itself, at times presenting a placid surface in which the overhanging verdure is reflected as in a mirror, is changeable in its moods: churning rapids and whirlpools alternating with the quiet reaches.

Until quite recently a visit to the upper reaches of the Wanganui was attended with many difficulties, as the journey had to be accomplished in a native canoe, a tedious and uncomfortable mode of travelling. And it is only since the beginning of the year 1904, when a weekly steam service between Pipiriki and Taumarunui was inaugurated, that this magnificent river has been made accessible to the ordinary traveller. The Wanganui also possesses great historic interest, and it was there that some famous battles were fought during the time of the Hau Hau war. Parts of old fortifications and redoubts are still standing on some of the hills, bearing witness to the troublous times of the early settlers.

The Wanganui River trip can be undertaken from Auckland via Taumarunui, whence a launch leaves for Pipiriki (84 miles) every Saturday morning, or from Wellington via Wanganui, steamers leaving for Pipiriki (60 miles) every day except Sundays and Mondays. From Pipiriki weekly launch departs for Taumarunui every Wednesday. The fare between Taumarunui-Pipiriki is 40/— single and 60/— return, between Pipiriki and Wanganui 15/— single and 20 — return. A daily service between Taumarunui and Pipiriki is projected, and two new steamers are being built for that purpose.

The steamers are licensed to sell alcoholic liquors, and all kinds of refreshments are obtainable on board. Meals are 2/— each. Tariff at Pipiriki Hotel 12/— per day.

Messrs. Hatrick & Co., the steamship proprietors have

also recently built a large houseboat (98 feet by 22 feet), fitted with every convenience and electrically lighted, which is stationed within easy reach of the railway at Taumarunui and available for residential purposes.

MOUNT EGMONT.

On the principal cape of the west coast of the North Island, rises the symmetrical snow-covered cone of Taranaki, better known as Mount Egmont, from which the surrounding fertile district takes its name. The mountain, an extinct volcano, is considered one of the most beautiful cones in the world, and has an altitude of 8,260 feet; but rising, as it does, straight from the sea and lowlands, its height is seemingly much greater. New Plymouth, the principal town of the district, around which many notable engagements took place during the turbulent times of the war, when the peaceful and prosperous settlement was invaded by savage Maori hordes, lies at its northern base.

There is a Maori legend to the effect that at one time Mount Egmont was united to Tongariro, its spouse, and that it will again return in time, devastating the country it traverses.

"Peerless and superb, great Egmont wills
To dwell apart, beside the western strand,
The sweeping outlines of his towering cone
Curve from the shore itself, and steadfast, grave,
Above the shifting, ever-changing wave
The solitary Titan watches lone,
Moveless, majestic."

Mount Egmont may be ascended either from New Plymouth, Stratford, or Eltham, the trip occupying about two days. Owing to the flatness of the surrounding country, the panorama from the summit is exceptionally extensive.

- A. From New Plymouth. The first 20 miles to Mountain House can be made by buggy (fare as per arrangement). The next stage of two miles to the summit must be made on foot, the journey occupying about four hours. As the snow-covered slopes are exceedingly treacherous in places, a guide should be engaged for this last portion of the journey, the fee being £1 per party. At the Mountain House (3,140 feet above sea level), tinned provisions can be purchased and simple meals obtained at 1/6, but no blankets etc. are provided.

- B. From Stratford to "Stratford House" (altitude 3,720 feet) on horseback (hire as per arrangement), thence on foot to summit. Guide's fee 12/— per day.
- C. From Eltham to Kaponga per coach (leaves daily at 3.30 p. m., Saturdays 4.40 p. m. fare 2/6 single, 4/— return). From Kaponga drive to Forest Reserve (fare as per arrangement), thence on foot via Dawson Falls (3,070 feet) to the summit.

WELLINGTON.

The city of Wellington, the capital of the Colony of New Zealand, is situated on the shores of Port Nicholson, an inlet of Cook's Straits, on the southern coast of the North Island, in lat. $41^{\circ} 17' 17''$ south and long. $174^{\circ} 49' 15''$ east. Besides being the seat of Government it is also the senior town in the colony, dating its foundation back to 1840, when a number of immigrants, under the direction of the New Zealand Company, formed a settlement there.

For many years progress was slow, and conflicts with the Maoris precluded any undue development, while the rivalry of Auckland did much to hinder the expansion. Even when the seat of Government was removed to Wellington in 1865, the vitality of the city was not much increased, and really its advance only began in the eighties, since when it has gone ahead with great strides. The opening of the railway into the interior of the North Island, and the realization of its central advantages as a shipping port, then brought Wellington into prominence, and its rate of improvement has been rapid ever since. It still remains the political, rather than the commercial centre of the Colony, though matters as regards the latter section of public life are by no means to be ignored, and, although Auckland remains so far the commercial capital, a very considerable amount of trade passes over the Wellington wharves.

The city is laid out round the shores of Lambton Harbour, a portion of Port Nicholson, and much of the fore-shore has been reclaimed and is now covered with business premises. The hilly disposition of the town prevented a regular alidgement of the streets, but as far as possible the rectangular system has been adhered to, though the older portion of the town, as in Sydney, still shows traces of the haphazard building operations of the early days. Wellington is well lighted by electricity and gas, and has an excellent supply of water from the Wainuimata River, on

the other side of the harbour, and the Karori Reservoir. A complete system of drainage is also in operation. There are some 37 miles of formed streets, the principal of which are in course of being wood-blocked. The city is under the control of a municipality.

Area and Population. With the Melrose borough recently amalgamated with the city proper, Wellington measures 5,400 acres in extent. Including suburbs, its population in 1901 was 49,344, the principal residential areas being Melrose (2,995) Onslow (1,499) and Karore (1,212).

Climate. The capital of New Zealand is usually referred to as "windy Wellington". Strong breezes are the almost invariable rule there, but the climate as a whole is mild and healthy. The hottest months are December, January and February, and the coldest: May, June and July. During 1902 the highest temperature recorded was 81° in January, and the lowest 32° in July. Altogether in that year there were 201 wet days upon which a total of 38.750 inches of rain fell. The prevailing winds are north west, south west and south.

Streets. The principal street is Lambton Quay, the name being all that is left to remind the visitor that the waters of the harbour washed up close to it. After Lambton Quay, the other main thoroughfares are: Willis Street — a continuation of Lambton Quay to the southward, Cuba Street, Taranaki Street running north and south, and Manners Street, Dixon and Ghuznee Streets running east and west. But the streets on what is known as the reclaimed area, are now the principal business centres, the chief of them being Johnston, Brandon, Panama, Grey, Hunter, Harbor, Fetherston and Victoria Streets. Lambton Quay and Willis Streets contain the principal retail establishments.

Harbour. It is without doubt the harbour that has been the making of Wellington. Deep water exists close up to the town, the bay itself is well sheltered, and the facilities for loading and unloading cargo are equal to if not better than those in any other part of New Zealand. Vessels drawing any draught of water may enter the heads, and there is 28 feet depth at Queen's Warf. The control of the wharfage accommodation of the port generally is under a Harbour Board, which, for a reasonable rate of 2/6 per ton, takes entire charge of the cargoes inward and outward, from ships hold to consignees cart or from consignees cart to ships hold as the case may be. The berthage accommodation is over 11,000 feet, and it is no unusual thing

to see six large oversea freighters at the quays on the same day, while a very full fleet of coastal vessels makes continual and frequent calls at the port. There is a patent slip at Evans Bay, a short distance from the city. The wharves are well supplied with loading machinery. There are five fixed and sixteen movable cranes, each double powered, and two hydraulic cranes of 10 and 35 tons respectively. The railways are extended on to the wharves so that the loading is carried on direct from truck to hold. Since its creation in 1880 the Board has spent more than £500,000 on harbour improvements.

Arrival. The largest ocean going steamers can be berthed at the quay, the Queen's Wharf being the principal wharfage accommodation for that class of vessel. The coastal boats of course can find a berth at any of the chief wharves. From the quay open carriages—landaus, which are the public conveyances in Wellington, are in readiness to drive the traveller to his hotel, the minimum charge being 2/6. If the tourist arrives by rail, the charge is 2/—.

Railway Stations. There are two chief railway stations: the Government and the Manawatu Company's, both situated on Thornton Quay. Two lines of railway run out of Wellington, one along west coast to New Plymouth, and the other northward to Napier.

Trams. Since June 1904 the horse trams running through the main thoroughfares have been converted into a greatly extended electric service. There is also a cable car to Kelburn. The single fare is 3 d. for any distance, a reduction being made for 12 tickets.

Cabs. Fares between different points of the city are charged according to a regular tariff, varying from 1/— to 2/— for each passenger. Fares by time are:— For one-horse cab, 4/— for first hour, and 1/— for every subsequent quarter of an hour; for two-horse vehicles, 5/— for first hour and 1/3 for every additional fifteen minutes. Between the hours of 7 p. m. and 8 a. m., half additional fare may be charged.

Hotels. The principal Hotels are:— "The Royal Oak" 12/6 per day; "Empire Hotel" 12/6 per day; "Occidental Hotel" 10/— per day, and "Hotel Cecil" 10/— per day. There are also of course hotels and boarding houses at which lower charges prevail.

Banks. The head offices of the Bank of New Zealand and the National Bank of New Zealand are situated here,

as well as branches of the following:— Bank of Australasia, Bank of New South Wales, Union Bank of Australia.

Public Buildings. Wellington being the seat of Government and the residence of the Vice Regal representative, the Parliament House and the principal Government offices—housed in what is said to be the largest wooden building in the southern hemisphere—are located here. The General Post Office and the Harbour Board Offices, both built in modern style, are conspicuous features of the city's architecture, while the Government Life Insurance Offices, and the Railway Offices and Printing Office are also substantial buildings. A new Town Hall, costing £ 60,000, the foundation stone of which was laid in 1901, is now approaching completion. A new Custom House is also being built, and the House of Parliament is gradually being converted into a permanent stone building.

Hospitals and Charitable Institutions. Charitable institutions are numerous in Wellington. Chief among them is the General Hospital, which is in keeping with the importance of the city, and has recently had an excellently equipped operating theatre added to it. Other philanthropic institutions are the Boys Institute, the Benevolent Institute and Convalescent Home, the Salvation Army Rescue Home, the Roman Catholic Industrial School for girls, and a Lunatic Asylum.

Churches. There are some fine churches in the city, most of the principal denominations being well represented. In the city itself there are four Anglican Churches:— St. Paul's (Pro Cathedral), St. Peter's, St. Mark's and St. Thomas'; four Roman Catholic Churches (St. Mary's Cathedral, burnt out in 1898, is now being rebuilt); four Presbyterian; three Wesleyan; three Congregational; two Baptist; a Jewish Synagogue on Wellington Terrace, and places of worship for several other denominations.

Educational Institutions. The Office of the New Zealand University, where the Senate meets, is located in Wellington. There is also a College for boys, a Roman Catholic College, a Girls High School, and a Technical School, besides several primary, private and denominational schools. When the long promised Victoria University College is erected (estimated to cost £ 30,000) it will occupy a prominent position on one of the terraces at the back of the city.

Consulates:— Belgium, Brazil, Denmark, German Empire, Italy, Japan, Netherland, Portugal, Spain, Sweden and Norway, and U. S. A. are represented.

Local Industries. Manufactories are not numerous in Wellington. The principal industries are, the Wellington Woollen Company's Mills, the Gear Company's Meat Works at Petons, and the Meat Export Company's Works at Nghauranga. Smaller works are iron and brass foundries, Sawmills, boot factories and others.

Press. There is one morning daily — "The New Zealand Times" — and one evening daily — "The Evening Post". "The New Zealand Mail", and the "Freelance" are published weekly, and there are several weekly and monthly publications devoted to special interests.

PLACES OF INTEREST AND AMUSEMENT.

Theatres. The Opera House, holding 1,700, is usually occupied by touring companies, while the Theatre Royal (seating capacity 1,000) is devoted to vaudeville entertainments. A spacious hall to be fitted with a suitable organ is included in the plans for the new Town Hall, and there are three or four smaller halls used for entertainment purposes.

Museum. The Colonial Museum, in Museum Street on the rising ground opposite Government House, is chiefly noted for its Maori house, 48 feet long by 18 feet broad, a perfect specimen of Maori art, inside of which are many Maori curios. There is also a good collection of geological specimens. The Museum is open to the public on week days from 10 a. m. to 4 p. m. and from 2 to 4 on Sunday afternoons. Entrance free.

Libraries. The Free Public Library in Mercer Street, though a comparatively recent institution, contains a fine assortment of books and current newspapers. It is open daily from 10 a. m. to 10 p. m., and Sundays from 2 p. m. to 5 p. m., and again from 6.30 p. m. to 9.30 p. m.

The privileges of the general assembly library at Parliament House are granted on application to students. There is also a recently erected public library at Newton, at the southern end of the city. To each of the public libraries a lending branch is attached.

Clubs. There are several excellent clubs in the city, among which are the Wellington Club (residential) on Wellington Terrace; the Central (non residential) in Lambton Quay; and the Wellington Junior Club (non residential) in Johnston Street, as well as a Commercial Travellers' Club, and a Workman's Club. Friendly societies are well supported, and the Masonic Order is strong. The city is also well off as regards musical societies and sport clubs.

1

1

1

GARDENS AND PLEASURE RESORTS.

Botanical Garden. The chief public reserve of Wellington is the Botanical Garden, extending over an area of about 70 acres of hilly land to the east of the city. The main entrance is in Tinakori Road, little more than half a mile from the centre of the town. From the highest point of the garden, a fine panorama of the city and harbour is obtainable. The return journey can be made by cable tram via Kelburne Park.

The Newtown Park is some distance to the south of the city, where there are also several recreation grounds, used by cricket, football and other sport clubs. The Basin Reserve, which is passed en route for Newtown, is at the southern end of Cambridge Terrace.

The Race Course is at Lower Hutt, and the Golf Links and Polo Grounds at Miramar. From an elevation at Queen's Park, at the Thorndon end of the city, there is another fine view of Wellington to be gained, while the Esplanade at that suburb offers opportunities for pleasant walks and sea bathing.

Mount Victoria (a morning's walk). A splendid view, not only of the picturesque harbour entrance, but also, on a clear day, of the snowy peaks of the Kaikoura Mountains on the Middle Island, can be had from the Signal Station on Mount Victoria. The walk can be extended by descending the hill on the farther side, returning to the town by way of Kilbirnie.

Days Bay is the most attractive seaside resort of Wellington, and very popular during the summer months for picnics and afternoon excursions. It is beautifully situated on the eastern shores of the harbour, at a distance of about eight miles from the city, and can be reached by ferry boat in half an hour. Fare 1/— return. (For time table see daily papers). Light refreshments are obtainable at a pavilion. Bathing machines on the beach offer opportunities for sea bathing, while pleasant walks can be taken through the native bush. Other harbour excursions can be made to Seatown and Karaka Bay (8 miles), steamers frequently calling there during the day (6d. return).

Queen's Drive is a favorite route for carriages and bicycles, and the drive can be easily accomplished in about two hours. The road skirts the western side of Port Nicholson and extends round, via Island Bay on the shores of Cook's Strait, to Newtown and back to the city.

Island Bay (5 miles) can also be reached by bus (thrice daily, 1/— return).

Lower Hutt. The Hutt Valley, below the Rimutaka Ranges, about nine miles north of the city, is a favorite residential suburb of Wellington. There is a good hotel ("Bellevue") situated in the centre of fine gardens planted with a great collection of indigenous trees and shrubs. The Hutt River, which flows near by, is well stocked with trout, and good fishing can be had there during the season. At a distance of about two miles from Lower Hutt is the course of the Wellington Racing Club, where the principal meetings are held in January, April (Easter), July and November.

Lower Hutt is reached by rail (9 miles). Return fare 1/6 first, and 1/— second class.

Wainuimata and Lowry Bay are on the opposite side of the harbour and may be reached by vehicle (fare as per arrangement) from Lower Hutt. Wainuimata (about 6 miles from Lower Hutt) is the source of the main city water supply. There is good trout fishing in the neighborhood.

LONGER TOURS.

The Marlborough Sounds. These picturesque inlets on the northern end of the Middle Island can be easily reached from Picton (53 miles), to where there is a daily (Sunday excepted) steam service from Wellington. The fare is 15/— single, and 20/— return. The journey to Picton ("Terminus Hotel") occupies about five hours. There is good sea fishing to be had in the smooth waters of the sounds which offer innumerable ideal picnic spots. Steam launches leave Picton for the different inlets frequently during the week, the fares varying from 4/— to 7/6 return. (For particulars see under the different detailed descriptions).

Wellington to Auckland.

A. Via New Plymouth, 397 miles. (Shortest route).

By train (7.30 a. m.) to New Plymouth (254 miles), arriving at 8.15 p. m. Single fare 24/11 first, and 14/2 second. From New Plymouth by steamer connecting with train, to Onehunga (135 miles), arriving following morning. Fares 31/— single, and 47/— return. (During the summer season steamer leaves daily, during the winter on Mondays, Tuesdays, Thursdays and Fridays only). From Onehunga by tram or rail to Auckland (8 miles). Single fare 1/—, and 9 d. respectively.

B. By steamer via West Coast (vide Union Co's. Guide), to Onehunga (301 miles). Fare 50/— single, and 85/— return. From Onehunga by tram or rail as in tour A.

C. By steamer via East Coast (564 miles, vide Union Co's., and Huddart Parker's Guide). Fare 60/— single, and 100/— return.

D. From Wellington by 8.20 a. m. train, arriving Napier 6.50 p. m. Fares 19/10 and 11/6, first and second. From Napier by coach (depart daily at 6.30 a. m.) via Tarawera to Taupo (100 miles), arriving at Taupo at 4 p. m. Fare 50/— single.

From Taupo to Rotorua (56 miles) by coach (departs daily at 7.30 a. m.; arriving Rotorua 5 p. m.) or by motor car (depart daily at 8.30 a. m., arriving at Rotorua at 4 p. m.). Single fare 25/—.

From Rotorua to Auckland (171 miles) by daily train. Fare 17/6 and 10/4.

E. Via Wanganui River and Thermal District (548 miles).

By train to Wanganui (depart daily 7.30 a. m., arriving 3 p. m.). Single fares 15/9 first, and second 9/6. From Wanganui to Pipiriki (60 miles) by river steamer. Steamer leaves Wanganui during summer months every day (Sundays and Mondays excepted), during winter season on Tuesdays, Thursdays and Saturdays. Fare 15/— single, and 30/— return.

From Pipiriki to Tokaanu (86 miles), by coach. (Summer running:— Mondays, Wednesdays and Fridays. Winter service Wednesdays and Saturdays). Coach leaves Pipiriki at 10 a. m., and arrives at Tokaanu at 1 p. m. on the following day.

From Tokaanu to Taupo (25 miles) by lake steamer. Daily service during summer leaving Tokaanu at 2.30 p. m., and arriving at Taupo at 5.30 p. m. During the winter season, steamer leaves Tokaanu on Mondays and Fridays at 10 a. m., arriving at Taupo at 1.30 p. m.

From Taupo to Rotorua by coach, and on to Auckland by train (vide Rotorua).

Instead of making the tour through the thermal district and across Lake Taupo, the launch may be taken from Pipiriki to Taumarunui (84 miles, fare 40/— single, and 60/— return), and the journey from Taumarunui continued by rail (vide Auckland—Taumarunui).

F. Via Mangakewa and Thermal District (483 miles).

By train (depart 7.30 a. m. arriving 5 p. m.) to Mangakewa (150 miles). Single fare 15/9 first, and 9/5 second class.

From Mangakewa to Waieurou (37 miles) by coach. Coach leaves 8.30 a. m., arriving Waieurou 5.30 p. m. Fare 20/— single, and 36/— return. During the summer months coach leaves Mangakewa every Monday and Friday, during the winter every Wednesday.

From Waieurou, coach departs for Tokaanu (44 miles), at 7 a. m. every Tuesday, Thursday and Saturday during the summer months, and every Thursday and Sunday during the winter, arriving at Tokaanu at 1 p. m. Fare 25/— single, and 45/— return.

From Tokaanu to Auckland same as tour E.

Wellington to Christchurch.

A. Via Lyttelton (182 miles, shortest route).

From Wellington to Lyttelton (175 miles) by daily steamer (Sundays excepted). Saloon fares, 20/— single and 35/— return. For hour of sailing vide Union Co's. Guide, or daily papers.

From Lyttelton to Christchurch (7 miles) by rail hourly. Single fare 1/— and 8 d., Return fare 1/6 and 1/—.

B. Via Buller and Otira Gorges.

By daily steamer (vide Union Co's. Guide) to Nelson (101 miles). Fares 20/— single, and 30/— return. Or by daily steamer (Sundays excepted) to Picton (53 miles). Fare 15/— single and 20/— return.

From Picton by rail to Blenheim (18 miles) at 8 a. m. and 6.15 p. m., arriving at 9.15 a. m. and 7.30 p. m. Fare 2/4 and 1/7.

From Blenheim by coach to Nelson (78 miles). Coach departs Tuesdays, Thursdays and Saturdays, arriving same day. Fare 25/— single and 40/— return.

From Nelson to Motupiko (31 miles) by rail. Fare 4/— first, and 2/8 second class. Train departs at 7.55 a. m. every Tuesday and Friday, arriving at 10 a. m., and connecting with coach leaving for Reefton (98 miles) at 10.30 a. m. The coach, which leaves on Tuesdays and Fridays only, reaches Reefton on the following day, the night being spent at Longford. Fares 50/— single, and 80/— return.

Or, if a side tour to Westport by way of the Buller Gorge is contemplated:—

From Motupiko to Westport (106 miles) by coach leaving Motupiko on Tuesdays and Fridays and arriving at Westport on Wednesdays and Saturdays. Fare 55/— and 80/— return.

From Westport to Reefton (49 miles), coach departs daily at 7.30 a. m., arriving at 5 p. m. Fare 20/— single, 30/— return.

From Reefton to Greymouth (46 miles) by daily train (departs 7.45 a. m., arrives 10.57 a. m.) and (on Wednesdays, Thursdays and Saturdays only) at 4.45 p. m., arriving at 7.45 p. m. Single fare 5/10 first, and 3/11 second class

From Greymouth to Otira (51 miles) train departs every Tuesday and Friday at 9.45 a. m., arriving at Otira at 1.25 p. m., and connecting with coach to Springfield. Single fare 6/5 first and 4/4 second class.

From Otira, coach leaves for Springfield (63 miles) at 3.15 p. m. every Tuesday and Friday; arriving at Springfield on Wednesday and Saturday at 2.30 p. m. The night is passed at Bealey. Fares 50/— single and 70/— return.

From Springfield there are two daily trains to Christchurch (44 miles), leaving at 7.15 a. m. and 3.50 p. m., and arriving at 9.50 a. m. and 6.25 p. m. respectively. The single fares are 5/7 first and 3/9 second class.

This journey is considered to include some of the finest tours in the Colony, viz. through the Otira, and, if the side trip is made to Westport, the Buller Gorge. In the Buller Gorge, the road is, in many places, a mere groove cut in the face of perpendicular cliffs rising from the river bed, and offers many magnificent glimpses en route. An idea of the Otira Gorge is best gained from the following vivid description by the Hon. W. P. Reeves (High Commissioner for New Zealand in London) in his book "The Long White Cloud". It also applies equally well to other less accessible parts of the Southern Alps. Mr. W. P. Reeves writes:—

"If the Southern Alps surpass the Kaikouras in beauty it is because of the contrast they show on their western flanks, between gaunt grandeur aloft, and the softest luxuriance below. The forest climbs to the snow line, while the snow line descends as if to meet it. So abrupt is the descent that the transition is like the change in a theatre scene. Especially striking is the transformation in the passage over the fine pass which leads through the dividing range between Pastoral Canterbury and Westland. At the top of Arthur's Pass you are among the high Alps.

The road winds over huge boulders covered with lichen, or half hidden by Koromiko, ferns, green moss, and stunted beeches, grey bearded and wind-beaten. Here and there among the stones are spread the large, smooth, oval leaves and white gold-bearing cups of the shepherd's lily. The glaciers, snowfields, and cliffs of Mount Rolleston lie on the left. Everything drips with icy water. Suddenly the saddle is passed and the road plunges down into a deep gulf. It is the Otira Gorge. Nothing elsewhere is very like it. The coach zig-zags down at a gentle pace, like a

great bird slowly wheeling downwards to settle on the earth. In a few minutes it passes from an Alpine desert to the richness of the tropics. At the bottom of the Gorge is the river foaming among scarlet boulders — scarlet because of the lichen which coats them. On either side rise slopes which are sometimes almost, sometimes altogether precipices, covered every inch of them, with thick vegetation. High above these tower the bare crags and peaks which, as the eye gazes upwards, seem to bend inwards, as though a single shock of earthquake would make them meet and entomb the gorge beneath. In autumn the steeps are gay with crimson cushion-like masses of rata flowers, or the white blooms of the ribbon-wood and Koromiko. Again and again waterfalls break through their leafy coverts; one falls on the road itself and sprinkles passengers with its spray. In the throat of the gorge the coach rattles over two bridges thrown from cliff to cliff over the pale green torrent.

In an hour comes the stage where lofty trees succeed giant mountains. As the first grow higher the second diminish. This is the land of ferns and mosses. The air feels soft slightly damp and smells of moist leaves. It is as different to the sharp dry air of the Canterbury Ranges as velvet is to canvas; it soothes, and in hot weather relaxes. The black birch with dark trunk, spreading branches and light leaves, is now mingled with the queenly rimu, and the stiff, small-leaved, formal white pine. Winding and hanging plants festoon everything, and everything is bearded with long streamers of moss, not grey but rich green and golden. Always some river rushes along in sight or fills the car with its noise. Tree ferns begin to appear and grow taller and taller as the coach descends towards the sea, where in the evening the long journey ends".

CHRISTCHURCH.

The town of Christchurch ($43^{\circ} 32' 16''$ S. Lat. $170^{\circ} 38' 59''$ E. Long.), capital of the provincial district of Canterbury (Middle Island), is situated about 8 miles from the sea coast on the banks of the small river Avon.

The town, which was founded in 1850, owes its origin to the colonising spirit which then infected all classes of English society. The district was first occupied by settlers sent out by the Canterbury Association under the auspices of prominent men in England, including the Archbishop of Canterbury, and Lord Lyttelton. The original intention was that the

settlement should embrace only such persons as were members of the Church of England, and those who first arrived on the scene made a very determined effort to import into the new colony all the cast and class distinctions of the manners and customs of an English countryside. Of course, with the expansion of democratic tendencies throughout New Zealand, and with the hard work necessary to carve out a home, this effort failed after serving as a fund of much humor, but the effect of the first intention is apparent to-day in the character of Christchurch City, which has been called the most English town out of England. The little willow-fringed river Avon, flowing through the centre of the town, further adds to the English appearance of its architectural style and general surroundings.

The site of the city on perfectly level country lent itself admirably to regularity in its laying out. The plan of the town is somewhat on the lines of Adelaide; the business portion is laid out on rectangular lines, the streets intersecting one another at right angles, while the whole of the western side of the town area is occupied by a park. Around all this is a space of land called the Town Belt, which belongs to the citizens and cannot be leased or sold; beyond this belt are various suburban boroughs, chief of which are Sydenham, St. Albans, Linwood, Woolston and New Brighton. On the 1st of April 1903 the three first named of these were amalgamated with the original city proper, into what is known as Greater Christchurch. Streets and roads throughout the city and suburbs are well laid out and practically level, so that Christchurch has justly been termed the cyclists paradise, and indeed there is perhaps no place in the world of equal size, where so many bicycles may be seen as here.

The city has been well drained at considerable expense, the sewerage being carried by a system of pipes for three miles, and discharged on to a waste of sand near the sea coast. But as a set off against the expenditure in this direction no elaborate water reservoirs are needed; a pure and copious supply has been provided by nature, and every resident has a never failing well — sunk at small expense — of artesian water in his own grounds. For the purpose of municipal government the city is divided into five wards, each of which returns three councillors.

Christchurch is the centre of trade for the Canterbury district and the headquarters of many manufacturing industries. Though eight miles from the sea, it is adequately connected with Port Lyttelton by a short railway line, running through the tier of precipitous hills which separates the city from the

sea. The tunnel piercing these hills is the longest in New Zealand, measuring $1\frac{1}{2}$ miles. Gas is supplied to the city by the Christchurch Gas Company.

Area, Population etc. The area of Christchurch itself is 1249 acres, being two miles long by one and a quarter miles wide. The value of rateable property is about a quarter of a million pounds sterling, and there are over three thousand ratepayers. Greater Christchurch on the figures of last census (1901) comprised a population of 42,286 persons, but including the adjacent borough of Woolston and the outside suburbs of Papanui, Feudalton, Riccarton etc., the total amounts to about 57,000.

Climate. Though somewhat colder than that of Auckland, the climate of Christchurch is a most congenial one during at least eight months of the year. Snow falls at intervals from the end of April to the end of July, but the days, even when the thermometer is lowest, are nearly always sunny and bracing. In the summer months (October to March), the maximum temperature is sometimes as high as 88 degrees, with a range to as low as 34°, at the coldest part of a day. In the winter half of the year (April to September) the highest recorded temperature was 71° (in 1902), and the lowest 25.9°. During the same twelve months rain fell on 154 days of the year, the total amount registered being 24.49 inches.

With the exception of Dunedin, Christchurch has a lower death rate than any of the four principal towns of New Zealand, the rate per 1,000 of the population being 12.24, and for the principal suburbs 12.14. On the whole, therefore, the climate may be considered a healthy and invigorating one.

Streets. The centre of the city is the Cathedral Square, the streets intersecting one another at that point being Worcester Street (from east to west) and Colombo Street (from north to south). To the north of the former are Gloucester, Armagh, Kilmore, Peterborough and Salisbury; to the south Hereford, Cashel, Lichfield, Tuam and St. Asaph Streets. To the east of Colombo Street are Manchester, Madras and Barbadoes Streets; to the west Durham, Montreal and Antigua. The town area is crossed diagonally by Papanui or Whateley Road, running from the northwest corner to Market Street, by High Street or Ferry Road running from Cathedral Square to the south east corner, and by Cambridge and Oxford Terraces on the north and south bank of the Avon respectively, and

following the windings of that stream from the south west to the south east. The streets are all 66 feet wide, well macadamised, and, as will be noticed, all named after sees of the Church of England. From north to south the streets are each two miles long, and from east to west they measure a mile and a quarter.

Arrival. The oversea traveller disembarks at the Port of Lyttelton, where ships drawing up to 25 feet can berth alongside the spacious wharves and sheds, and the railway is close beside. A train journey of from 20 to 25 minutes (trains leave about hourly), takes the traveller into Christchurch Railway Station (single fares 1/— first, and 8d. second class; return 1/6 and 1/—), whence the hotels and boarding houses are easily reached on foot or by cab. The station itself is on the South Town Belt, and the street immediately facing the entrance (Manchester Street) leads right to the centre of the city. Custom officers are in attendance at Lyttelton to examine passengers' baggage.

Railway Station. Situated at the foot of Manchester Street on the South Town Belt, the station is the terminus of the short line from Lyttelton, and is an important stopping place on the main line of the Middle Island Railway, running from Culverden, 69 miles north of Christchurch, to Dunedin, 230 miles south, with several branches to the south and west of that city.

Tramways. The Christchurch Municipality has laid down a tramway from Cathedral Square to New Brighton, a distance of 5 miles, while the Canterbury Tramway Company have constructed lines from Cathedral Square to the railway station and to Port Hills, Sydenham (5 miles), to Papanui (3 miles); to Sunnyside (4 miles); and to Sumner (5 miles). These routes traverse all the principal suburbs.

Hansom Cabs may be hired at the following rates:— From one place to another within the city boundary 1/—. From the Christchurch Railway Station to any place within the city boundary 1/—. For each additional half mile beyond the city boundary 6d. By time — within the city, 4/— per hour; for any time up to fifteen minutes 1/6; for each subsequent fifteen minutes or less 1/—. In the case of carriages licensed to carry more than two passengers, one fourth of the above fares is chargeable for every passenger exceeding two. Half extra fares are chargeable between 10 p. m. and 12 p. m., and double fares between 12 p. m. and 7 a. m.

Omnibuses run to Riccarton and Fendelton.

Hotels. There are between thirty and forty residential hotels in Christchurch, chief among which are:— "Warner's Hotel" (perhaps the best in New Zealand), 12/6 per day; and "Coker's Hotel" 10/6 per day. There are also numerous boarding houses within walking distance of Cathedral Square.

Public Buildings. Though not a metropolis, Christchurch has some handsome buildings, and the central portion, where stands the Cathedral, Government Offices and the principal commercial buildings, has a substantial look. Other fine public buildings are the Canterbury Hall, recently erected by the Agricultural and Pastoral and Industrial Associations at Addington, the Museum, High School, and Canterbury College.

The Canterbury Agricultural College, at Lincoln, about 14 miles south from Christchurch, is affiliated to Canterbury College and liberally endowed by the Government. In all it holds about 60,000 acres of land under this endowment, and possesses extensive buildings and an experimental farm of a very complete character, comprising some 700 acres of cultivated land. Visitors are admitted at any reasonable hour. Lincoln may be reached by rail (fare 3/8 return), or by coach (1/— each way); but these services are not very convenient, and it is better to hire a trap, the driving being along a level road through good farming country all the way.

The General Post Office, in Cathedral Square, with which is connected a Telegraph and Money Order Office, is open every day (except Sunday) from 9 a. m. to 5 p. m. The Telegraph Office is open during the week from 8 a. m. to 12 p. m.; on Sundays from 9.30 a. m. to 10 a. m. and from 5 p. m. to 5.30 p. m. The Money Order Office is open on week days from 9 a. m. to 4 p. m.

Baths. There are commodious swimming baths in Christchurch itself, and sea bathing may be enjoyed at Sumner and New Brighton, and other popular resorts along the coast; all easily reached from the city.

Local Industries. There are several important manufacturing enterprises in Christchurch, chief among which are those which have to do with the freezing and export of meat to Great Britain. Two of the meat freezing works can treat 8,000 sheep daily, and the shipping facilities for frozen

produce at Lyttelton are up to date and complete. In the city and suburbs are large engineering works, foundries, iron works, boot and clothing factories, and agricultural implement manufactories. At Kaiapoi 12 miles from Christchurch there are large woollen mills.

Banks. The five banks doing business in New Zealand all have branch offices in Christchurch, namely:— The Bank of New Zealand, The National Bank, The Union Bank, The Bank of New South Wales, and the Bank of Australasia.

Consulates. The following countries have Consuls or Consular Agents in Christchurch:— Belgium, Denmark, France, Germany, Holland, Italy, Norway, Spain, Sweden, and U. S. A.

Churches. The Anglican Cathedral, situated right in the centre of the city, and said to be a copy of the Caen Cathedral in Normandy, is a commanding structure with a graceful spire 240 feet in height. It has a peal of ten bells. Other places of worship in the town are:— Anglican — "St. Luke's" (Manchester and Kilmore Streets); "St. John's" (Hereford and Madras Streets); "St. Michael's" and "St. Mathew's". Roman Catholic — Church of the Blessed Sacrament (Barbadoes Street); "St. Mary's" (Manchester Street). Presbyterian — "St. Andrew's", "St. Paul's", and the North Belt Church. Two Wesleyan Churches. A Synagogue in Gloucester Street, and several churches of other denominations. The Salvation Army Barracks are in Victoria Street.

Hospitals and Charitable Institutions. The Christchurch Hospital, to which visitors are admitted, has 116 beds, and near the city, at Sunnyside, is a Lunatic Asylum with 96 wards and 462 beds. Other philanthropic institutions are the Rhodes' Convalescent Home, the Memorial House for the Aged at Woolston, the City Mission and Destitute Mens' Home, a Deaf and Dumb Asylum at Sumner, the Orphanage at Lyttelton, the Industrial School Burnham, the Mount Magdala Asylum, the Samaritan Home, and St. Mary's Home. The New Zealand centre of St. John's Ambulance Association is also located at Christchurch.

Press. There are two daily morning papers: "The Christchurch Press", and the "Lyttelton Times"; and two daily evening papers, "The Star", and "Truth". The "Canterbury Times", "Weekly Press", "New Zealand Sportsman", "New Zealand Methodist" etc. are published weekly. There are also several fortnightly, monthly and other publications.

PLACES OF INTEREST AND AMUSEMENT.

Theatres etc. The principal place of entertainment in Christchurch is the Theatre Royal, frequently tenanted by good touring companies. Other halls used for entertainment are the Agricultural and Pastoral Association Hall, 100 feet by 85 feet, and capable of seating 3,000 people, the Opera House, the Masonic Hall, and the Oddfellows Hall.

Museum. The Christchurch Museum is a handsome pile of buildings occupying a commanding position in Antigua Street, and containing upwards of 200,000 specimens. In the New Zealand portion, the collection of Moa skeletons is said to be unequalled anywhere, while the skeletons of whales and the collection of shells and geological specimens are also very fine. The Museum is open (admission free) from 10 a. m. to 5 p. m. on Wednesdays, and from 2 to 5 p. m. on Sundays.

Public Library. Under the control of the Governor of the Canterbury College there is a useful, though comparatively small Public Library, consisting of some 30,000 volumes. Reading rooms are attached, and the reference part of the library has about 12,000 volumes, the remainder of the volumes belonging to the lending branch. There is also a School of Arts in the city.

Clubs etc. The principal residential clubs in Christchurch are the Canterbury, and Christchurch Clubs. Others are the Ladies', the Federal, and the Working Mens' Club, the Savage Club, the several Friendly Societies, the Liedertafel and other Musical Societies, and the Art Society, which holds an exhibition in the early part of every year.

Exhibition. The yearly show of the Canterbury Pastoral and Agricultural Association, held at Addington during the first week in November, is one of the most important in the whole of New Zealand, and by some is regarded as the best of its kind in the southern hemisphere. Competitors and spectators alike are drawn from all parts of New Zealand. At the same time, on the Riccarton Racecourse, is run the New Zealand Cup, the premier race meeting of the New Zealand Turf. For that carnival week Christchurch is practically on holiday throughout.

Gardens and Parks. On the western boundary of Christchurch is Hagley Park, a beautiful domain of 400 acres, through which the Avon picturesquely flows. Part of this park is set aside for cricket, football, polo and other playing fields. Another portion is occupied by the Government

Domain, most of which is laid out as a botanic garden. Adjoining are the Acclimatisation Society's Grounds with fish ponds, hatcheries and rearing grounds, and the nucleus of a zoological collection. Boats can be procured at any of the numerous boat sheds, and a row up the river from the Hospital Bridge through the gardens and Hagley Park constitutes a pleasant outing.

EXCURSIONS.

Besides Hagley Park, the sightseer will find few interesting places to visit in the neighborhood of Christchurch. From the Cathedral Spire (240 feet high) a splendid panorama of the city and surrounding country can be obtained. Sumner (tram 1/— return) is a fashionable watering place on the sea coast. Another popular seaside resort is New Brighton (5½ miles, tram 1/— return).

Good hare, quail, and wild duck shooting is to be found within easy distance. For the last named Lake Ellesmere (25 miles) is the most favored. Trout fishing is obtainable in the Selwyn, Rakaia, Ashley, and many of the smaller streams which can be cheaply reached by rail from the city. But for the more active, the cycle is decidedly the vehicle for Christchurch and its surroundings. There are miles of perfectly level and well maintained roads stretching out in all directions, and given decent weather, the cyclist can tour the whole of the Canterbury district with but little exertion.

Akaroa (56 miles), a watering place on the eastern shores of the Pakiriki Inlet, on the Banks Peninsula, is a favorite holiday resort of the residents of Christchurch. ("Grange's Family Hotel").

Little River (36 miles) can be reached by train leaving Mondays, Wednesdays, and Saturdays at 8.40 a. m., arriving at 10.55 a. m. Single fare 4/7 and 3/1. Coach leaves Little River for Akaroa at 11.30 a. m. on the days mentioned, arriving at Akaroa at 3 p. m. Fare 10/— single and 15/— return. Akaroa may also be reached by steamer leaving Lyttelton every Tuesday and Friday at 2 p. m., and arriving at Akaroa at 7.30 p. m. Fare 10/— single and 15/— return.

The Hanmer Springs. The thermal springs of New Zealand, though more numerous and occupying a greater area in the North Island, are not confined to that portion of the Colony, a number of healing springs, ranging in temperature from 90° to 120° Fahr., and known as the Hanmer Springs, being situated at an elevation of 1,200 feet within

a day's journey of Christchurch. Accommodation is provided for at the Government Sanatorium near the springs, which have been adapted for private and swimming baths. The charge for first class accommodation is 7/— per day for the first seven days, and 6/— per day for every additional day. Second class, 4/— per day for first week, and 3/— per day after that time. At "Jolie's Pass Hotel", some distance from the springs, the tariff is 7/6 per day.

The springs and Sanatorium cover an area of thirteen acres, and are situated in the Hanmer Plains, a valley twenty miles in length and two in width.

Though of comparatively little interest to the tourist, the place is invaluable as a health resort for residents of the Middle Island, its high altitude and consequent bracing climate assisting the curative action of the waters to no small degree. Good fishing is to be had in the many streams; trout weighing up to 10 lbs. having been caught in the neighborhood, while game, including deer and wild cattle is abundant in parts of the surrounding ranges, which rise to a height of 6,000 feet.

Means of access:— By daily train (departs 7.35 a. m., arrives 12.10 p. m.) to Culverden (69 miles). Fare 8/4 first, and 5/5 second class.

From Culverden to Hanmer (24 miles), coach leaves daily at 1 p. m., arriving at 4.45 p. m. Fare 7/6 single, and 14/— return.

Combined excursion return tickets are issued daily between 1st of October and 30th of April, and thereafter every Tuesday, Thursday and Saturday, the fare being 28/—.

Mount Cook. Three days by rail and coach brings the traveller from Christchurch to the Hermitage (Mount Cook), a Government hotel, which is situated at an elevation of 2,510 feet in a valley surrounded by some of the finest peaks of the Southern Alps. This is the best base for excursions and explorations, for which every facility is afforded. Tracks have been made by the Government to points of interest in the neighborhood, and for intending mountaineers, the services of competent guides are available.

A number of glaciers, which here run down to within 2,000 feet above sea level, are easily accessible from the Hermitage, even for ladies, notably the Mueller and Hooker Glaciers. From the crest of the moraine of the Mueller Glacier, a point not more than half a mile distant from the hotel, a good view of parts of the Mueller and Hooker Glaciers, as well as of Mount Cook, Mount Sefton and others is obtainable. The distance to the Hooker Glacier is two miles and a half.

MOUNT COOK AND HOCHSTETTER ICE FALLS.
NEW ZEALAND ALPS.

The Tasman Glacier on Mount Cook, which is said to be the largest of its kind in the world (it is eighteen miles long and more than two miles across at its widest point), is also within comparatively easy distance. There is an accommodation hut known as the "Ball Hut" on the glacier, at a distance of about twelve miles from the Hermitage, which can be reached either on foot or horseback. Two miles distant from the hut is the magnificent "Hochstetter Ice Fall", a curtain of broken, fantastic ice, coming down 4,000 feet on to the Tasman Glacier. The Murchison Glacier is $7\frac{1}{2}$ miles from the Ball Hut.

The trip over the lower passes to the West Coast can also be undertaken from here, but is attended with some difficulties. The journey was however successfully negotiated by a lady traveller in company with a small party, in April 1903.

The tariff at the Hermitage is 10/— per day for the first seven days, and 8/— per day after that time. For the use of the huts 2/— per day is charged, or, with provisions 7/6. No charge is made at the huts for visitors staying at the Hermitage.

Guides' fees vary according to the nature of the excursion from 15/— to 40/— per day for one person, and from 6/— to 30/— for each of a party; porters 10/— per day; riding or pack horses 7/6 for first day and 5/— for each subsequent, consecutive day. Alpine equipments such as tents, sleeping bags, ice axes, rucksacs, ropes, snow glasses, lanterns etc., may also be hired at reasonable prices. No charge is however made for them when a guide is employed.

Means of access:— By rail to Timaru (100 miles). Train departs daily at 11 a. m., arriving at Timaru at 2.33 p. m. Fare 11/7 first and 7/5 second class. Train leaves Timaru for Fairlie (39 miles) at 4 p. m., arriving at Fairlie at 6.40 p. m., (Mondays depart 4.50 p. m., arriving 7.25 p. m.). Fare 5/— first and 3/4 second class.

From Fairlie coach departs for the Hermitage (96 miles) every Tuesday and Friday at 7.30 a. m., arriving at 4.30 p. m. on the following day. The night is spent at an accommodation house at Pukaki. Fare 40/— single and 70/— return.

Between the 1st of November and the 31st of March, return excursion tickets for the combined rail and coach journey may be obtained at 90/— first and 82/6 second class. These tickets are available for three months, subject to the coach portion of the journey being completed before the 30th of April.

Christchurch to Dunedin, Invercargill and the Bluff by Rail (386 Miles).

Train leaves daily at 11 a. m., arriving at Dunedin (230 miles) at 8.15 p. m. Fare 22/5 first, and 12/10 second class.

From Dunedin train departs for Invercargill (139 miles) daily at 9 a. m., arriving at 3.15 p. m. Fare 14/10 first, and 9/— second class.

From Invercargill to the Bluff (17 miles) trains leave at frequent intervals. Single fare 2/— first, and 1/2 second class. Return fare 2/6 and 1/6 respectively.

DUNEDIN.

Like Canterbury, Dunedin owes its origin to the emigration from the United Kingdom of men who were determined to take the religion of their fathers to the country which was to be their children's. It was founded in 1848 by an association representing the Free Kirk of Scotland, and even the plans of the town had been drawn out in Edinburgh. As a consequence the streets are named after those in the latter town, and the travelling Scotchman finds himself surrounded by familiar names even down to the Canongate, while the suburbs likewise recall the outskirts of Edinburgh. Dunedin is situated at the head of Otago Harbour, in latitude $45^{\circ} 52'$ S. and longitude $170^{\circ} 31'$ E. A great deal of the business portion is built upon land reclaimed from the sea. Although compared to some of the other towns in New Zealand, the surroundings are rather tame, the city itself is picturesquely situated and the residential portion of it is located on hills, running up to some 300 feet in height at the head of the harbour, on the west side of the city. The city is well laid out on the strictly rectangular plan, with a few diagonal streets near Princes Street (the principal thoroughfare), on the side furthest from the harbour. On the outskirts of the city is the Town Belt, a strip of land reserved for the use of the citizens. It averages one fifth of a mile in width and comprises 500 acres, a great part of which is virgin bush. The city proper is about two and a half miles long by seven-eighths of a mile wide.

Dunedin is supplied with water from a reservoir at the head of the valley of the Leith, and from another and larger reservoir on the Silverstream. The streets, of which there are between forty and fifty miles in the municipal area, are wide and well lighted, gas being supplied to the city by the Corporation. Dunedin's progress languished from its inception until the beginning of the

sixties. In 1861 however, gold fields of great richness were discovered at Gabriel's Gully, about 60 miles from the town, and diggers poured in from all parts of Australasia. From that impetus Dunedin has never gone back, and to-day it stands as one of the busiest and most prosperous of New Zealand towns. The principal suburbs are South Dunedin, Caversham, Roslyn and Mornington. Including the suburbs, the population of Dunedin at the 1901 census was 52,390.

Climate. Situated as it is in the southern portion of the South Island, Dunedin has a somewhat colder climate than the generality of New Zealand towns. The highest temperature is rarely above eighty five degrees in the summer, while the thermometer frequently drops below freezing point in the winter months — May to August. The highest temperature experienced in 1902 was 86° in the month of February, and the lowest 29° in June. On 184 wet days in the same year 53.56 inches of rain fell. The prevailing winds are south west, north east and west.

Streets. In the centre of the city is the Octagon, from which branch Princes Street to the south west, George Street to the north east and Stuart Street running north west and south east. On the harbour side of Princes and George Streets are Crawford Street, King Street, Cumberland Street, Castle, Clyde and Forth Streets, and on the landward side, joining them diagonally, are London Street, York Place, and High Street, a very spacious thoroughfare reaching to the railway station.

Harbour. Otago Harbour is divided into two, the upper and lower harbour, of which the latter measures six miles from Taiaroa Heads to Port Chalmers, and the former, from Port Chalmers to Dunedin, is seven miles in length. Port Chalmers is also connected by rail with Dunedin (fares $1/6$ and $1/-$). The larger steamers can only come up to Dunedin itself at high water, and consequently passengers and cargo are usually transhipped at Port Chalmers. By way of protecting the city, batteries have been erected on two prominent headlands at Ocean Beach and a third battery at Otago Heads.

Arrival. Dunedin is connected by rail with Christchurch on the north and Invercargill on the south, the railway running right through the city, parallel with and close to the shore of the harbour, with a station almost in the centre of the town, from which an easy walk takes the visitor to the principal hotels. Cabs and luggage vans may be engaged at the station.

Railway Station. The Railway Station is close to the water's edge, with High Street crossing its landward face on a diagonal, and Cumberland Street also running close to it. On arrival, the visitor passes a small reserve known as the Triangle Gardens, and reaches the Custom House Square at the intersection of Princes, High and Rattray Streets.

Tramways. Besides buses, cable trams keep up the communication with some of the suburbs, while part of an extensive electric tramway system, the plant of which compares favorably with anything in Australasia, is also in operation.

Cabs and two-horse hackney carriages may be hired at the following rates:— One-horse vehicle 4/— for first, second and third hour, and 3/— for every subsequent hour. Half and quarter hours at proportionate rates. Two-horse vehicle 5/— per hour and 4/— per hour after the third hour. By distance:— For half a mile or less, 1/— for one-horse, and 1/6 for two-horse vehicle. For a mile or less 1/6 for one-horse and 2/— for two-horse vehicle. For every additional half mile or less 9d. and 1/— respectively. Luggage not exceeding 28 lbs. in weight is allowed without extra charge. Double the above fares are chargeable between 10 p. m. and 8 a. m.

Hotels. The "Grand Hotel", 12/— per day during summer, and 10/— during winter season; "Wain's Hotel" 10/6 per day; "City Hotel" 7/6 per day; "Excelsior" 7/— per day; and "Coffee Palace".

Public Buildings. There is an air of architectural permanence, and business solidity about Dunedin, and citizens proudly claim it as the best built town in New Zealand. The notable public buildings comprise, the Post Office in which is contained the Telegraph and Money Order Office (corner of Albany and King Streets), the Town Hall in the Octagon, the High School, with a tower 68 feet high, the Otago University, a handsome pile of Gothic design erected in a spacious reserve of eight acres, with a large hall, 90 feet long by 45 feet broad, utilised as a museum. The offices of the banks, Insurance offices and commercial firms are well built and some of the churches are very ornate structures.

Churches. Episcopal: "St. Paul's Pro Cathedral" in Stuart Street, at the Octagon; "All Saints, and "St. Matthew's". There are five Presbyterian churches, among which are the two largest in New Zealand. A Wesleyan Church is in Stuart Street, the Baptist Tabernacle and independent churches

all in Great King Street, and the Roman Catholic Cathedral in Rattray Street. There are also churches of different denominations in all the suburbs.

The Dunedin Hospital is one of the largest in New Zealand. It has seven wards and 125 beds, nurses quarters, operating theatre etc., and stands in grounds 5 acres in extent.

Local Industries. There are several manufactories in operation, the principal being iron foundries, rolling mills, meat refrigerating works, flour mills, boot and clothing factories. A paper mill is near the city, at Woodbaugh. At Mosgiel (10 miles away), and at Kaikorai are large woollen mills, employing several hundred hands.

University. The Otago University was opened in 1871 and now includes the faculties Arts and Science, Medicine, and Mining. The School for Mines, awards diplomas and certificates in mining, metallurgical and geological mine and hand-surveying and assaying. There is a training school for teachers, a school of art and design, and several high and elementary schools.

Baths. Good sea water swimming baths are located at St. Clair.

Banks. The Banks of issue doing business in Dunedin are: The Bank of Australasia, the National Bank of New Zealand, the Bank of New South Wales, the Bank of New Zealand and the Union Bank.

Consulates. Belgium, Denmark, France, Germany, Italy, Netherlands, Portugal, and U. S. A.

Exchanges. There are three Stock Exchanges in Dunedin, the senior one occupying a fine block in Princes Street once known as the "Colonial Bank Buildings".

Press. The daily papers are "The Otago Daily Times", and the "Evening Star", published in the morning and afternoon respectively. The weeklies are the "Otago Witness", "Christian Outlook", "Budget", "Workman and Farmers' Circular", and the "New Zealand Tablet". The "Katipo" is published monthly.

PLACES OF INTEREST AND AMUSEMENT.

Theatres etc. There are two theatres, the "Princess" and the "Alhambra", in High and Stafford Streets. There is also a large hall, 89 feet long by 80 feet wide, owned by the Otago Agricultural and Pastoral Association, and much used for public entertainments. The Garrison Hall in Dowling Street as well as other smaller places also serve similar purposes.

Museum. Attached to the Dunedin College is the Museum, the specimens being lodged in a large hall with two galleries and a basement. The entrance to it is in Great King Street, about five minutes' walk from the University. There are some six thousand specimens of natural history contained in it. Open to the public daily from 12 a. m. to 4 or 5 p. m. On Sundays from 2 p. m. to 4 p. m. or 5 p. m. On application travellers are admitted from 9 a. m.

Art Gallery. In a portion of the Museum Building is the Art Gallery, though so far the collection is hardly worthy of so dignified an appellation. The room containing a considerable number of fine specimens of Maori carving is however very interesting. Open daily (admission free) from 10 a. m. to 5 p. m.

Libraries. Dunedin has no public library, but the University library, containing over 5,000 volumes, is open to the public for reference. The Athenaeum and Mechanics Institute possesses a library of over 21,000 volumes, divided into reference and circulating branches, with large reading, class, and smoking rooms. Open on week days from 9 a. m. to 10 p. m. On Sundays from 2 p. m. to 6 p. m.

Gardens etc. Besides the Town Belt already described, there are the Botanical and Acclimatisation Gardens, to the north of the city, the old racecourse at St. Kilda, the new racecourse at Wingatui, the Caledonian Grounds on the Anderson's Bay Road, and numerous other recreation reserves, while the Ocean Beach is only two miles from the centre of the city.

PLEASURE RESORTS.

The Queen's Drive. The city itself may be viewed from the Queen's Drive which traverses the Town Belt, the drive occupying an hour and a half, or, by taking the cable tram to Mornington, and returning via Rattray Street to Roslyn. Nichol's Creek Waterfall is about two miles from the tramline along Duke Street. The Falls are of no height but the surroundings are picturesque, and the trip is considered one of the most enjoyable in the neighborhood. During the summer, conveyances ply between the town and the Falls at irregular intervals.

Ocean Beach and St. Clair (salt water swimming baths), can be reached after a short tram journey.

Portobello, on the opposite side of the harbour, is reached by road, the trip taking the best part of a day (coach fare 1/—). A drive to Waitati or Blueskin, by way of the North East Valley Road, is another favorite excursion for both tourists and residents. For Taieri Beach, passengers take train to Henley, then proceed by steam launch along the Taieri River to the beach.

Blue Spur and Gabriel's Gully. An interesting two days' trip may be made to Gabriel's Gully and the Blue Spur, via Lawrence. At the Blue Spur dredging and gold sluicing operations are carried on, the latter said to be the greatest gold sluicing and hydraulic elevating works in the southern hemisphere. Gabriel's Gully is the site of the first gold discovery in the Colony.

Means of access:— By train (twice daily) to Lawrence (60 miles). Fare 7/5 and 4/11 single, and 14/10 and 9/10 return. From Lawrence on foot or by bus (3 miles, fare 1/—).

Stewart Island, the southernmost, and by far the smallest of the three main islands of New Zealand, can be reached from the Bluff (24 miles). The S. S. "Theresa Ward", leaves the Bluff every Wednesday at 10 a. m. (from December to February also on Saturdays), returning same day at 4 p. m. Ordinary fares 5/— single, and 7/6 return, during the summer months 3/6 single, and 5/— return.

Good shooting is to be had on the island—ducks, mutton birds, pigeons etc. being plentiful. Enormous oysters, known all over Australasia as "Stewart Island Oysters", are found in great quantities around the coast. For excursions an oil launch (Messrs. Rein and Fitzsimond's) can be hired during the tourist season at 40/— per day, or £5.0.0 per week, including fuel and attendance.

THE SOUTHERN LAKE COUNTRY.

To the southern lakes and fiords, which present some of the grandest scenery that can be found in New Zealand, there is a choice of several routes. The sounds or fiords are best reached by the regular annual excursion steamer which leaves Dunedin about the middle or end of January. Other steamers also call at some of the sounds about that time if sufficient inducement offers. The steaming on these excursion trips is mostly done during the night, the days being spent at anchor in the smooth waters of the sounds,

or in sailing up the narrow inlets. Boats, and an oil launch, for visits to the more remote points, are placed at the disposal of the passengers at these stopping places.

The southernmost lakes — Hauroto, Te Anau, Manapouri, Wakatipu, Wanaka and Hawea, are most easily accessible by rail and coach from the Bluff and Invercargill, or from Dunedin via Gore and Lumsden, while the lakes further to the northward, as Ohau, Pukaki and Lake Tekapo, are best reached via Hakataramea or Fairlie.

LAKE WAKATIPU.

The best known and most easily accessible of all lakes, has for many years been connected with the coast by a railway terminating at Kingston. The lake, which covers an area of 114 square miles, lies at an altitude of 1,069 feet above sea level, and has a length of fifty and an almost uniform width of about two and a half miles. The greatest ascertained depth is 1,242 feet.

The water of the lake is very clear and of a greenish blue tint, and it is noteworthy, that the temperature a few feet below the surface never varies more than from 52° to 54°.

The scenery about Wakatipu differs from that of Manapouri and Te Anau inasmuch as the mountains bordering those lakes are covered with thick forest on their lower slopes, whereas the mountains surrounding Wakatipu are bare of any vegetation, save brownish grass, ferns, and stunted bushes, and it is only near the head of the lake where vegetation is more prolific. But on the whole the scenery offers some beautiful and bold features and has been frequently likened to that of Scotland. On the northern shores of the lake, just below Queenstown, are the "Remarkables", a ridge of irregular and curiously jagged cliffs 7,688 feet in height, which makes the snow appear as so many white veins criss-crossed on their dark and almost perpendicular peaks.

Taking Dunedin as a starting point, Kingston, at the foot of the Lake (174 miles), can be reached in about eight hours and a half. — Train leaves Dunedin daily at 9.5 a. m., arriving at Kingston at 5.30 p. m. Fare 17/9 first, and 10/6 second class. (During the winter months, trains run on Mondays, Wednesdays, Fridays and Saturdays only). From Kingston to Queenstown (25 miles) steamers leave in

QUEENSTOWN, LAKE WAKATIPU

connection with every train, the journey occupying about two hours. Fare 4/— first, and 2/6 second class. Return excursion tickets from Dunedin to Queenstown are 35/— first, and 20/6 second class.

QUEENSTOWN.

Queenstown, a small township about half way up the lake, is the centre of a gold mining district and possibly the most picturesquely situated town in Australasia. It is also the most favored health resort in the South Island, a bracing climate and a dry atmosphere rendering it particularly suitable for the treatment of pulmonary complaints. The deer stalking (near Lake Wanaka) as well as the scenery also attracts numerous tourists during the summer season.

The hotels here are "Eichhardt's Hotel", 10/— per day; and "Supreme Court Hotel" 8/— per day. There are also some boarding establishments in the town and neighborhood.

EXCURSIONS.

Glenorchy, at the head of the lake (35 miles), is reached by steamer in about three hours. The fare is 5/— first, and 3/3 second class. During the trip three islands are passed, of which the largest, Pigeon Island, covered with luxuriant growth, is a favorite picnic resort. A high mountain range bounds the lake on both sides, and a number of waterfalls can also be seen from the steamer's deck. Nearing Glenorchy, the higher snow-capped peaks of the alps come into view, among which Mount Bonpland (8,102 feet) and Cosmos Peak (8,000 feet) are prominent. This is the most picturesque portion of the lake, and Glenorchy, the terminus of the steamer, is a good base from which mountaineering and other excursions may be undertaken.

Accommodation may be had here at the "Mount Earnslaw Hotel", 10/— per day; and the "Glenorchy Hotel", 8/— per day. There is also a good accommodation house (Aitken's) at Paradise, about 12 miles from Glenorchy. This is perhaps the most beautifully situated spot in the neighborhood. A buggy from Aitken's usually meets every steamer, but it is advisable to communicate beforehand with the proprietor if a stay at that place is contemplated. The tariff is 8/— per day.

From Glenorchy, excursions may be made to an easily accessible glacier, about eight miles distant, as well as to the famous glaciers of Mount Earnslaw, distant about 25 miles. Shorter tours, such as the ascent of Mount Alfred (distant about ten miles), from the top of which a magnificent panorama is obtainable, can also be undertaken from here, a good bridle path leading to the summit.

Ben Lomond. From Queenstown, the Ben Lomond (5,747 feet) can be ascended without difficulty, both on foot or horseback. (Horses 7/6 to 10/—; guide 7/6). From the summit there is a fine view.

Maori Point. A drive or ride to Maori Point (28 miles), known as the "Skippers Drive", offers some wild, romantic scenery en route. The road, which crosses a saddle of the Dan O'Connell Range at a height of about 4,000 feet, has been excavated from the face of a precipice, for a distance of nearly two miles. (Fare by arrangement).

Arrowtown. Another interesting drive is that to Lake Hayes, Arrowtown, and back; the round trip covering about 26 miles. (Fare as per arrangement). The Frankton arm of the lake is skirted for four miles until the little hamlet of that name is reached. A detour can here be made to the Frankton Rapids, where the waters of Lake Wakatipu find their only visible outlet into a tributary of the Clutha River. Another four miles brings the traveller to Lake Hayes, a sheet of water measuring about a square mile in area, and famed for its large trout; and soon after to the little mining centre of Arrowtown. The Shotover River, from the banks of which great quantities of gold were taken by early prospectors, is crossed before the lake is reached. On the return journey the Arthur's Point Road may be taken, and the Shotover River again crossed by a bridge about a hundred feet above the river bed.

Arthur's Point is named after a man who left Queenstown one Sunday to look for gold, equipped with no other implements than a knife and pannikin, and returned in the evening with several pounds' weight of the precious metal.

Lake Excursions. During the summer cheap excursion steamers ply frequently between Queenstown and the favorite spots on the lake; but in rough weather a trip on the lake, especially in the little "Ben Lomond", which does more than an ordinary amount of rocking, and should be avoided by those inclined to "mal de m  r", is far from being a pleasant experience.

LAKE WANAKA.

Forty-two miles to the northward of Queenstown lies Lake Wanaka, at an altitude of 928 feet above sea level, and covering an area of 75 square miles. Its total length is 29 miles, its width varies between one and three miles, while its greatest ascertained depth is 1,085 feet. Several small islands are contained within this lake, which is, unlike Wakatipu, encompassed by densely wooded mountains. One of these islands again contains a lakelet on its summit, some ten acres in area and several hundred feet above the water level, which may be truly said to be "a lake within a lake".

A small steamer plies between the little township of Pembroke ("Russel's Hotel" 10/— per day) and the head of the lake, visiting the most attractive spots en route. The following is quoted from the official guide book:—

"After leaving Pembroke wharf the vessel passes one or two small islands and halts at Manuka Island, where the unique spectacle of a lake (Lake McDougall) on an island is to be seen. The view from here to the head is considered one of — if not the — finest in Southern Otago. The Harris Ranges, Buchanan Ranges of which Mount Alta (7,536 feet), Black Peak (7,560 feet), and Niger Peak (6,616 feet) are the principal summits, are seen on the westward, whilst to the eastward Mount Grandview (4,760 feet) shows out in all its majesty. Further along the Minarets (7,189 feet) and Turret Peaks, the Makawa Mountains, Mount Burke and Mount Gold, and the McKerron Ranges gradually come into view."

From Lake Wanaka to Mount Cook. Coach leaves Lake Wanaka for Pukaki (100 miles) every Monday, arriving the following day. Night spent at Lindis. Fare 45/— single.

From Pukaki coach leaves for Mount Cook (40 miles) every Wednesday and Saturday, arriving same day. Fare 20 — single, 35/— return.

Both the above services do not run during the winter months.

SPECIMEN TOUR.**From Dunedin to Lake Te Anau, Manapouri and Overland to Milford Sound.**

Leave Dunedin either on Tuesday or Friday by 9.5 a. m. (daily) express train for Lumsden (137 miles), arriving at 3.30 p. m. Single fare 11/7 first, and 7/5 second class, return fare double that amount.

For travellers arriving in New Zealand from the Tasmanian side, the Bluff (the first port of call) is the best

starting point for the lake district, the train leaving Invercargill for Lake Wakatipu at 7.5 a. m. connecting with the Te Anau coach at Lumsden.

At Lumsden there are several hotels, of which "Crosbie's Railway Hotel" (10/— per day), owned by the proprietor of the coach service Lumsden-Te Anau, is perhaps the most convenient to stay at. The little township is surrounded by sheep runs, and offers nothing of particular interest. Sportsmen may spend the rest of the afternoon in hare and rabbit shooting, the latter of which especially are very plentiful in the neighborhood.

On the next morning the journey is continued to Te Anau (52 miles), the coach leaving Lumsden every Wednesday and Saturday (during the winter months on Saturdays only) at 11 a. m. (after the arrival of the train from Invercargill). Fare 25/— single, and 40/— return. A lunch hamper and liquid refreshments must be taken, as nothing is obtainable en route until late in the evening.

High mountains are in sight from the start, but the scenery for the first part of the journey is somewhat monotonous. After Mosburn, the terminus of a short branch from the main trunk line, is passed, the mountains draw in more closely, and the landscape gradually assumes a more interesting character.

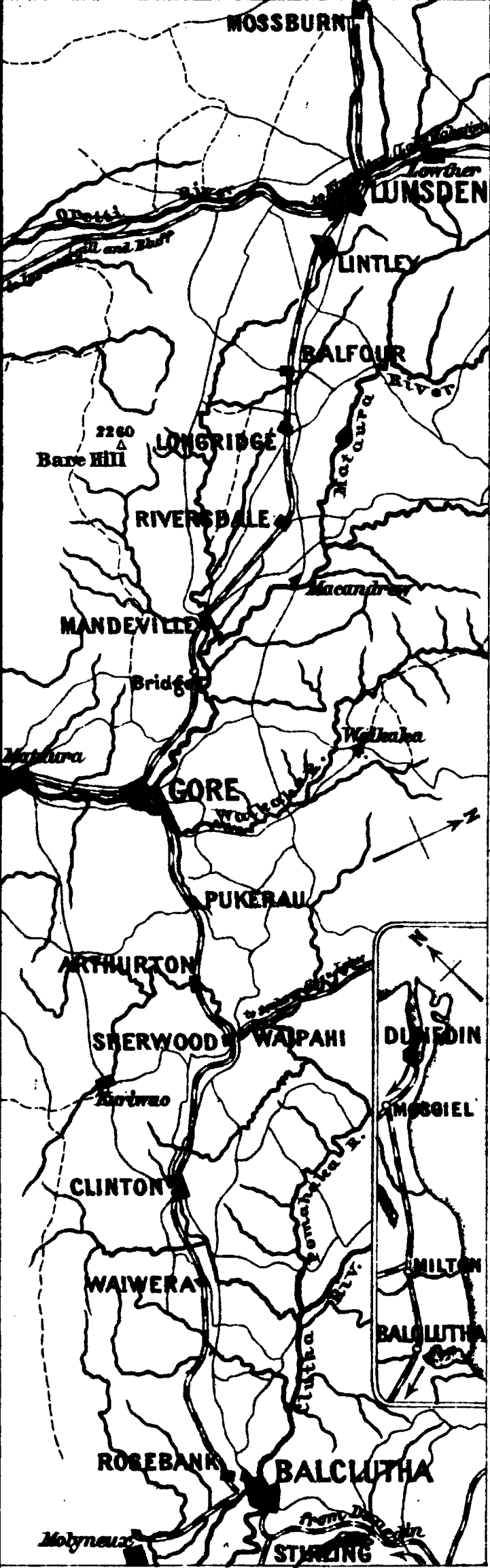
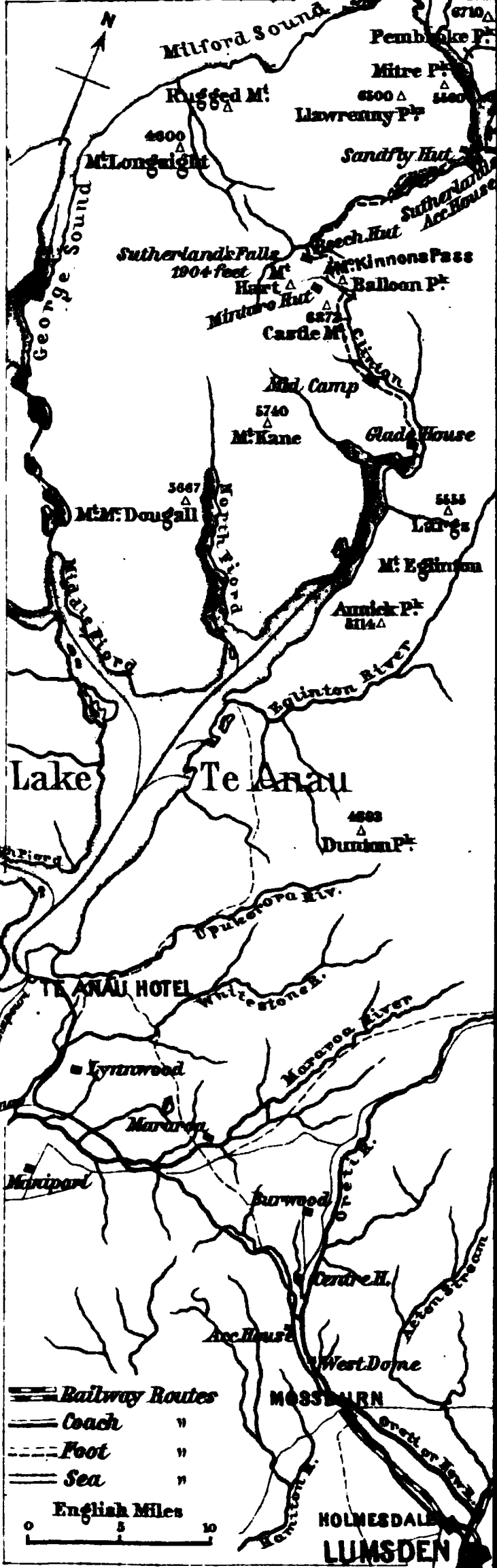
Game is plentiful. Tens of thousands of grey and paradise ducks as well as occasional black swans can be seen in places, while rabbits are also very numerous. The grotesquely shaped and curiously colored ridges of the Takitimo Mountains are passed on the left, and towards sunset the "Key of the Lakes Hotel", where refreshments are obtainable, is reached. (This spot is a favorite centre of operations during the shooting season). Resuming the journey from here, the snow-covered peaks beyond the lakes come into view, but are soon obliterated by the growing darkness. Tourists who wish to visit Lake Manapouri first, change into a buggy which meets coach about half way between the "Key Hotel" and Te Anau. Lake Te Anau ("Te Anau Hotel", 10/— per day) is reached at 8.30.

LAKE MANAPOURI.

On the next day a detour to Lake Manapouri, may be made, a drive of 12 miles (single fare 10/—, return fare 15/—), bringing the traveller to "Murrell's Accommodation House" (10/— per day), from where excursions and lake trips can be arranged.

MILFORD

SOUND ROUTE



Manapouri — which is said to be an incorrect rendering of the Maori word Manawaipouri ("lake of sorrowing heart") — is by some considered to be the most picturesque of all lakes in the Colony, and indeed its irregular coastline and numerous wooded islands lend it a peculiar charm, not shared by any other lake. There is none of the marked ruggedness which characterises Lake Wakatipu, yet there are bold masses of gigantic mountains to temper the softer beauty of the scene. On the north side rise the magnificent Cathedral Peaks (5,134 feet), on the south the Hunter Range, and on the west the Matterhorn Mountains, the highest summit of which — "Leaning Peak" — attains a height of 4,858 feet. The lake itself, which covers an area of about 50 square miles, is considered the deepest in New Zealand, its depth — 1,458 feet — reaching considerably below sea level. A steam launch is available for lake excursions, and the chief points of scenic interest can be reached for certain reasonable fixed charges. Smith Sound (11½ miles) may also be reached from here after a walk of about five or six hours, during which a saddle of 1,700 feet in height is crossed. This journey is however attended with some difficulties as a passable track has not yet been formed, and should therefore not at present be attempted by ladies.

LAKE TE ANAU.

Te Anau, the largest lake in the South Island (altitude 694 feet above sea level), has an area of 132 square miles. Its main body, from which three great arms, from ten to eighteen miles in length, run out to the westward, is 38 miles long, and varies in width from one to six miles. Except on its south-eastern shores (where the hotel stands), the Lake is bounded by steep mountains, covered with dense forest on their lower slopes, from which rugged, bare peaks of granite rise above the snowline. Numerous wooded islands are scattered about its surface, and further add to the beauty of this lake.

When returning to Te Anau it should be remembered that the lake steamer does not run on Sundays, and also that only two trips per week are made to the head of the lake; and, as the neighborhood of the "Te Anau Hotel" offers nothing of interest, it is best not to make a longer stay here than absolutely necessary, unless excursions to the inlets known as South, Middle and North Fiords, are contemplated. The scenery in these fiords is bold and magnificent and well worth a special visit. The steamer is available for

these excursions on Tuesdays, Wednesdays, Fridays and Saturdays, but the journey is not made unless the passenger fares total a minimum of £4. In the winter season (last Monday or Thursday in April to first Monday or Thursday in November) the steamer does not run.

On Mondays and Thursdays the regular trip to the head of the lake ("Glade House") is made, the steamer starting at 7 a. m. Fare 20/— single, and 30/— return.

The trip up the lake is a most enjoyable one. The scenery increases in grandeur as the head of the lake is neared, and the perpetual snow-capped peaks and glaciers of the alps stand out more prominently.

The launch trip terminates in a most beautiful little cove, walled in by magnificent mountains, clothed on their lower slopes with rich vegetation, their rugged summits glistening in their perpetual covering of snow and ice.

From the wharf where the steamer moores, there is a good track through the bush to "Glade House", a Government accommodation house, which can be reached after a walk of three quarters of a mile. Surrounded by a forest of birch trees, with almost perpendicular snow-covered mountains rising immediately behind, and the shallow Clinton River rushing on toward the lake in front of the house, it is difficult to conceive a more charming and secluded position than that of Glade House. The accommodation is however, at the time of writing (1905), insufficient for any but a small party of tourists, and it is therefore advisable to secure accommodation beforehand. The tariff at Glade House is 10/— per day for first seven days, and 8/— per day after that time. The charges for bed or any meal are 2/6 each. No alcoholic drinks are obtainable here, as is also the case at other Government accommodation houses throughout the Colony.

Overland Route to Milford Sound. Glade House is the starting point for the overland trip to Milford Sound (33 miles), which offers the grandest scenic combination in the whole of New Zealand. The track is good for the most part, and passable even in the worst places, and the fact that a number of ladies have accomplished the journey successfully, proves that there are no very great difficulties to be surmounted. It is nevertheless advisable to secure the services of a guide, as unforeseen obstacles may at any time occur. The guide's fee is 15/— for one way, and 20/— return for each person. The trip may be made in easy stages, rough accommodation being obtainable at huts. Tariff 2/— per meal, and 2/— per night.

From Glade House to Milford Sound. After the Clinton River is crossed, at the commencement of the journey, the track leads through a forest of birch and totara trees. The undergrowth everywhere is most prolific. A great variety of ferns and similar plants thrive in this moist atmosphere, and everywhere creepers and climbing mosses festoon the trunks and branches of the trees. Occasionally the track skirts the river bank, and reveals glimpses of emerald-hued waters, and of snow mountains on one side or the other. Now and again gigantic trout are distinctly seen swimming lazily in these quiet reaches above the white sandy bottom, the great transparency of the snow-fed waters of the Clinton rendering their forms as clearly discernable as beneath a sheet of glass. At other times, in the more shallow parts, the river assumes a wilder aspect, and impetuously rushes over its rocky bed, a veritable mountain torrent. M'Kinnon's (the late explorer's) hut is passed on the way. When emerging from the bush at Mid-Camp, the first hut, after six miles easy walking, a magnificent view bursts upon the traveller: Great granite giants rise almost perpendicularly on either side of the narrow valley, their bare, cold summits towering up to the perpetual snow-line, and their lower inclines clad with rich, and almost tropical verdure. The gap between the two sides, is filled in by another cyclopean rampart rearing its ice-clad head in the hazy blue of the distance. On the whole, Mid-Camp is an ideal spot where to pass a day or even a week, and no one will regret breaking their journey at this early stage. From Mid-Camp to Mintaro, at the head of Clinton Valley, the distance is six and a half miles. The track leads partly through bush and partly over debris caused by avalanches. In several places of the valley, where huge avalanches have fallen and solidified, great ice tunnels are formed through the mass by the constant trickling of the waters. Narrow cascades and waterfalls, thin as silver threads, can be traced to their source thousands of feet above, and at every turn new beauties and interests are revealed.

At the Mintaro huts again the night can be passed if desired, and a lover of nature will find it difficult to resist the temptation. This is the end of the valley, where the Clinton River is born. On all sides rise colossal, cloud touching columns of rock, finding their culminating point in the beautiful spire of Mount Balloon, which may not be inaptly described as the "Jungfrau" of New Zealand. Speaking of this peak, the author of "Camp Life in Fiord land" says:— "Compared with "Balloon", rising out of a deep wild gorge without break or blemish for more than a mile and a

quarter in vertical height, "El Capitan", or "Sentinel Rock", of the Yosemite, sinks into utter insignificance, while the much-vaunted "Cathedral Spires", in the "Garden of the Gods", Colorado, might be placed bodily on the top of "M'Kinnon's Pass" without seriously challenging the supremacy or sway of the New Zealand King overhead."

Leaving Mintaro, the saddle between Mount Balloon and Mount Hart, known as "M'Kinnon's Pass" after its discoverer, has to be crossed. The lowest level of the pass is about 3,500 feet above sea level, and about 1,500 feet above the huts. A fairly steep zig-zag path winds up the cliff, and the saddle is reached after a climb of about a mile and a half. Here opens a panorama that will stamp itself indelibly on the mind of the fortunate beholder. The deep chasm of the Clinton, stretches away to the southward, and in front other stupendous walls of granite rise from among the luxurious vegetation of the Arthur Valley, towered over by majestic peaks. On the left, and seemingly within a stone's throw, lie the snow fields of Mount Hart, while immediately on the right soars the needle-like pinnacle of Mount Balloon. Here all nature is on a grand scale, and man feels his littleness.

The botanist also will find much to interest him here. The alpine flora is in evidence, and besides the *Celmesias* (mountain aster), several species of *Edelweiss* (*Ranunculus lyalli*), and numerous other flowers, left for an expert to name, can be found here.

The descent on the far side is partly made along the very edge of the precipitous base of Mount Balloon, but the track is fairly good under the circumstances, and sufficiently wide to offer no great actual difficulties, except, as sometimes occurs, when portions of the path have broken away in heavy weather. On reaching the bottom, a gully strewn with broken debris and boulders is crossed, and the forest re-entered. The hardest climb of the trip is now over, and a further walk of about three miles, brings the traveller to Beech Huts, the last halting place before Milford Sound, and situated like the others in most romantic surroundings. From here a detour to Sutherland Falls may be made (distance about a mile and a half).

From Beech Huts to "Sandfly Hut", Milford Sound (13 miles), is the longest stage on the journey, but the track is an easy one all the way. Within fifteen minutes' walk of the huts a point is reached from where a good view of the great Sutherland's Fall is obtained. This is the highest known fall on earth, its three leaps aggregating a total of 1,904 feet. The Arthur River is then crossed in a cage or

4,500 FEET OF MITRE PEAK
MILFORD SOUND

by means of a punt, and several other mountain torrents on rather slippery wooden bridges, which would bear improvement. A number of other fine falls are also passed. The Giant's Gate Fall, an enormous column of clear green water shooting into a circular pool, being especially remarkable and beautiful.

Lake Ada, formed by the blocking of the valley by landslips, is next reached, and from the path, which in places is cut out of the solid cliff on the lake side, the submerged tree stumps can be seen below. The lake can also be crossed in a boat.

Animal life is as plentiful here as it is all along the route, and it is satisfactory to know that all game within the precincts of this district is protected. The lake simply teems with various kinds of wild-duck, teal, and black swan, all surprisingly tame. Wekas, kakas and other native bush fowl are often seen, and in the evening the rasping cry of the kiwi is frequently heard.

Sandfly Hut at the end of the walk is well named, but this pest is no less noticeable at any of the other stopping places. From here Sutherland's Accommodation House is reached by oil launch in about twenty minutes, and the journey comes to its conclusion.

The comfortable accommodation house (tariff 10/— per day, 50/— per week) commands one of the finest views imaginable, Mitre Peak and the glacier of Mount Pembroke being in full view across a stretch of the calm waters of the sound, which even here, in its innermost end, has a depth of 1,100 feet. The Bowen Falls (near by) and the many other attractions may be visited by steam launch (10/— per head, per day, minimum 40/—), and the wonderful Tutuko Glaciers, to which a track is now being made, are accessible in about three hours from here. The unsurpassable scenery of this grandest of sounds has been so often described, that it is unnecessary to again rehearse its numerous attractions, which must be seen to be fully comprehended.

The actual tour from Te Anau to Milford Sound and back, can be accomplished in two or three days by a good pedestrian, but as many weeks will not be too much to spend among the glorious and indescribable scenery of this most beautiful region.

BRITISH NEW GUINEA.

AREA.

The territory of British New Guinea measures about 800 miles from east to west, and 200 miles from north to south; at its widest points. The total area is approximately 90,540 square miles (mainland 87,786 square miles, islands 2,754 square miles). The coast line of the mainland measures 1728 miles and of the islands 1936 miles. The nearest point to the Australian continent is about 90 miles distant therefrom.

CLIMATE AND RAINFALL.

The climate of the Possession, besides being tropical, is remarkable for its general humidity. It is, on the authority of Sir William MacGregor, not nearly so unhealthy as it was at first supposed. In the dry season it is not unfavorable to the European constitution, but the fevers come in with the wet season, and most of the settlers suffer from malarial attacks at that period of the year. The highlands of the interior are more salubrious than the coast. Thermometer readings at Port Moresby give 81.56 F. as the average annual temperature, the average maximum being 86.65 F. and the average minimum 73.69. The yearly rainfall at selected stations is on the average: Port Moresby 37.25 inches; Daru (west) 85.31 inches; Samarai (south-east) 126.5 inches; Dogura (north-west) 59 inches.

PHYSICAL FEATURES.

At the easterly end of the Possession the country is mountainous and from the coast the altitude rises towards the west into an imposing chain, to the chief range of which the name of Owen Stanley has been given. Here there are several lofty peaks, the highest being Mount Victoria (13,205 feet), Mount Suckling (12,228 feet), Mount Obree (10,246 feet), Mount Yule (10,046 feet), and Mount Albert Edward, which is said to be about the same height as Mount Victoria. Along the northern boundary, running from east to west, is the Albert Victor Range with Mount Brassey and Mount Wynne as its chief peaks, but the character of the country gradually changes, and the western end of the Possession is generally low and swampy for a

long distance from the coast. The coastal districts are studded with extinct craters, and the igneous nature of the country both on the mainland and the islands is well marked. Inland the formation is schistose, while in the west sandstone predominates. Most of the islands included in the Possession are mountainous and of schistose formation, the highest altitude, 8,000 feet, being reached in Goodenough Island.

British New Guinea is well watered, most of the principal streams emptying into the Gulf of Papua. The principal rivers are the "Fly", of which 620 miles are in British territory, and which is navigable for 500 miles in small vessels, the "Purari" (navigable for 120 miles), the Bailala, Bamu and Aird rivers flowing south, and the Musa, Kumusi, Mambare and Gira flowing north. The country generally is covered with dense tropical forests alternating with alluvial plains of great extent.

FLORA AND FAUNA.

The indigenous animals are similar to those in the German territory (see under that heading), and comprise pigs, several kinds of kangaroo and wallabies, opossum, and echidnae, while the birds include the cassowary, birds of paradise (eleven or twelve varieties) many kinds of pigeons, ducks, quail, snipe, woodcock, parrots, and some notable species of flycatchers. Crocodiles are numerous in the creeks and rivers as are also snakes in the forests, and of the latter two venomous varieties, including the death adder of the Australian mainland, have been found.

The flora is very varied. On the highest mountain chains there are products of temperate climes, the prevailing forest trees being the cypress; on the slopes from seven to ten thousand feet the trees are myrtaceous, while lower down the ever-green oaks are common. On the low lands are several varieties of hardwood trees, sandalwood, wild nutmeg, breadfruit trees, bananas, coconuts and other tropical plants.

POPULATION.

There are about 500 Europeans in the Possession, the majority of whom are either traders or miners. The interior not having been thoroughly explored, it is only possible to conjecture the native population, and that has been estimated by various authorities from 300,000 to half a million. Some parts of the interior are said to be densely populated.

The native inhabitants are Papuas, differing in no material degree from the aborigines of other parts of the island continent, and, as is also the case on the north-coast of New Guinea, they are divided into numerous separate communities, varying from each other not only in their physical appearance, according to their habitat, but also in their manners and customs, and even in their speech, though the Malayan or Polynesian element is traceable throughout the different dialects.

HISTORY.

In the early discoveries of New Guinea, England did not participate, and it was not until 1699—1700, that Dampier, as the first English navigator, visited and circumnavigated the island. Seventy years later Captain Cook sailed along its coast, followed in 1791 by Captain Edwards in the *Pandora*, and others.

The nineteenth century saw the survey ships of Dumont D'Urville, Captain Owen Stanley (1846—50) and others mapping out the coast line, while in the latter half of the century various expeditions set out to explore the interior; their efforts meeting with more or less success. In 1883 however the island sprang into a much greater prominence than it had hitherto possessed, owing to the action of the late Sir Thomas McIlwraith. That politician, then Premier of Queensland, gave orders for the annexation of so much of the island as was not in the hands of the Netherlands Government, which mean all that part of the island east of the 141° meridian. The action was notified to the Colonial Office and endorsed by all the other colonies of the Australian group, all of whom were impressed with the advantage of having the island a British possession. But the Colonial Office refused to ratify the annexation. On the 16th of November 1884 a British Protectorate was proclaimed over the southern coast of New Guinea east of the 141 meridian, and the next month a German squadron hoisted the German flag on the north-west coast, annexing it from the 141st meridian to the Huon Gulf. In 1886 an agreement was entered into between the British and German Governments defining the boundaries of their possessions, and engaging on the part of both not to make any further acquisitions of territory, except protectorates, or to interfere with the extension of each others influence. It was not however until 1895 that the convention between Great Britain and the Netherlands, finally fixing the boundary line, was signed at Hague.

The Possession was formally declared British Territory in September 1888. The territory known as British New Guinea comprises all the land in the south and south-eastern quarters of the island from the 141 meridian to East Cape, then north-westward along the coast to Mitre Rock, then along the 18th parallel to the 147th meridian, then on in a straight line to the intersection of the 6th parallel and the 144th degree, and thence to the point of intersection of the fifth parallel with the 141st meridian. It includes the Trobriand, Woodlark, D'Entrecasteaux and Louisade groups, as well as all other islands lying between the 8th and 12th parallels of S. latitude and the 141st and 155th degrees of E. longitude. When these affairs had been settled, the Australian colonies undertook to pay an annual sum towards the maintenance and the administration of the possessions. This arrangement lasted until 1902, when the Commonwealth Government took over the administration of British New Guinea on payment of £200,000, though the possession remains a Crown Colony.

BIBLIOGRAPHY.

Among the books dealing with British New Guinea the following will be found of value:—

"Discoveries in New Guinea and Polynesia" by Capt. Moresby of H. M. S. "Basilisk" (published in 1876); "Interior of New Guinea" by Capt. J. A. Lawson (1875); "What I did and saw in New Guinea" by T. M. Albertis (1880); "From my Verandah in New Guinea" by H. H. Romilly C. H. G. (1889); and "Western Pacific and New Guinea" by the same author; "Pioneering in, (1887) and "Pioneer Life and Work" in New Guinea" (1895) by the Rev. J. Chalmers; "British New Guinea" by J. P. Thomson (1892); "British Protectorate" by C. Lyne (1885); "Toil, Travel and Discovery in New Guinea" by T. F. Bevan (1890); "Exploration and Adventures in New Guinea" by Capt. J. Strachan; "Two years among Savages of New Guinea" by W. D. Pitcairn (1891); "Through New Guinea" by Capt. Webster; "Picturesque New Guinea" by Lind (containing excellent illustrations).

ADMINISTRATION.

In its form of Government British New Guinea is a Crown Colony, with a Lieutenant Governor appointed by the Imperial authorities, but as the Commonwealth of Australia contributes £20,000 per annum to defray the expenses of Government, the policy of the possession is largely dictated

by the Federal Cabinet. Associated with the Governor in the executive details is a council consisting of the chief judicial officer and four resident magistrates, the legislative functions being discharged by the same council of officials with the addition of an unofficial member. The territory is divided into six divisions, each presided over by resident magistrates. The chief judicial officer acts as administrator of the Government in the absence of the Lieutenant Governor.

The acts of ordinance passed by the local legislature are subject to the approval or dissent of the Commonwealth Government, and all measures must of course be subject to the final direction of the Secretary of State for the Colonies. The land ordinances now in operation provide that no one shall have any land transactions with the natives except the Lieutenant Governor, who may purchase or lease land not required for food production or otherwise by the natives. Such land may be granted in fee simple to natural born or naturalised British subjects, but restrictions are in force against the granting of areas of very large extent to any one person or a syndicate of persons. The law is administered by the chief judicial officer, and by resident magistrates and Government Agents. There is a force of armed constabulary consisting of about 150 natives under a military commandant, and a system of village policemen has proved very successful; the constables, who number about 200, maintaining good order in the native settlements.

CUSTOMS.

Import duties averaging about 10% are levied on most articles imported into the country, with the exception of machinery and agricultural implements, building materials, fresh fruits and vegetables, and other necessary articles of food, which are either duty free or lightly taxed. Spirits are taxed with 14/— per gallon, beer, ale etc. with 6d. to 9d. per gallon, wines 2/— to 6/— per gallon. On manufactured tobacco a duty of 3/— per lb. is imposed, while trade and unmanufactured tobacco pays 1/— in the lb.

The three ports of entry of the Protectorate are Samarai, Port Moresby and Daru.

POSTAL AND TELEGRAPHIC.

In postal matters the same regulations as those of the State of Queensland are in force, and the same postage stamps are used for the present, though it is expected that special postage stamps for the Possession will

be issued before long. During the year 1902—1903, 28,251 letters, 1,735 packets, and 30,711 newspapers were received, while 26,863 letters, 1,366 packets and 7,878 newspapers were despatched.

A telegraph line connects Samarai with the Thursday Island.

CURRENCY.

The currency of the Protectorate is the same as on the Australian continent, British coin being the recognised tender.

COMMUNICATION.

A regular mail communication is maintained with the Australian mainland, steamers of Messrs. Burns Philp & Co's fleet calling at frequent intervals at the principal ports, besides which the Government yacht "Merry England" makes irregular trips to the continent. No railways, tramways or macadamised roads exist, and most of the internal communication is by way of river.

FINANCE.

The principal sources of revenue are the contributions from the Federal Government, customs dues, gold field receipts, land sales etc., licenses and sales of stamps. The expenditure is devoted to salaries of Government officials, maintenance of the Government yacht, "Merrie England", and public works. For 1901—2 the revenue was £36,868 and the expenditure £38,484.

COMMERCE AND SHIPPING.

The principal imports into the Colony are: liquors and foodstuffs, building material, drapery, hardware and tobacco. The exports are gold, sandalwood, indiarubber, copra, pearls and pearl shell, bêche-de-mer, and turtle shell. Most of the external trade is done with Queensland and New South Wales, there being little or no direct shipment elsewhere. Regular lines of freight and passenger steamers ply between Sydney, Brisbane and the ports of the Possession. The imports for the year ending June 30, 1903 were valued at £62,366, and the exports at £68,891. Nearly all shipping

is British, the chief ports of entry and clearance being Sydney and Brisbane, and the yearly tonnage being about fifty thousand.

MISSIONS.

Missionary enterprise is very active in British New Guinea, most of the Protestant denominations and the Roman Catholics being represented. Although it cannot be said that the natives show themselves amenable to Christian doctrines, the missionaries, with the help of the native teachers, have succeeded in inculcating a better observance of social and utilitarian conditions among the natives. The Church of England has erected the Possession into a Bishopric, and the Roman Catholics are under a Bishop Coadjutor. Most of the mission stations have native schools attached to them for the instruction of native children, both in their own language and in the rudiments of an English education.

PRODUCTS.

The products of the territory, except gold, which is produced only in the British territory, are similar to those of other portions of the island, though broadly speaking the south coast of New Guinea is more swampy and less fertile than the coast line of the German or Dutch Protectorate, and therefore less adapted for agricultural pursuits, though the mountain climate is doubtless equally favorable for the cultivation of tropical products.

Tea, coffee and cocoa, though not indigenous, thrive well, and at the plantations of Messrs. Burns Philp & Co., on the summit of the Astrolabe Range, there is a considerable area under Arabian coffee, which seems to be doing well. The climate is also congenial to the growth of cotton, rice, maize, and all kinds of tropical fruits, and the Government have recently taken in hand the preservation and extension of coconut plantations with very encouraging results. The copra export at present is small, the value of that product exported in 1902-3 being no more than £3,782. Extensive planting operations have however been carried on for some time, and a greatly augmented yield may be expected within the next decade.

Among the forest products, there are several native trees and plants yielding a good quality of rubber, of which commodity 4 tons 4 cwt., valued at £1,209, were exported in 1902-3. The available timber comprises, among other valuable

woods, cedar, ebony and sandalwood, of which latter, quantities totalling £ 4,494 in value were shipped in the year under review.

Among marine products may be mentioned pearlshell, which is found in quantities well distributed over the eastern seas of the Colony, particularly in Torres Straits and the Louisiade Group, though the depth at which it occurs hinders diving operations materially. Bêche-de-mer is found in large quantities, sponges exist on most of the coral reefs, and turtleshell is also obtainable. During the year 1902-3 pearlshell to the value of £ 2,436, and bêche-de-mer to the value of £ 6,892 were exported.

Of late years gold mining in British New Guinea has fallen off, though gold in considerable quantity has been found, more especially on the islands; Woodlark Island in the D'Entrecasteaux Group, where three crushing mills have been erected, being the centre of the industry. Colors of gold have been found in several of the rivers, and when the interior is more available to prospectors the country known to be gold-bearing in a profitable degree will, it is expected, be largely extended. It is only very recently that quartz mining has been undertaken, and that only at Woodlark Island, alluvial workings being the rule elsewhere. A gold field on the Mambare and Gira rivers has attracted attention, but access thereto is difficult. Specimens brought from the upper Fly River have been found to contain gold, topaz and beryl. Native sulphur occurs in some of the islands, and also cinnabar and plumbago has been seen at various places on the south west coast, while coal exists in the Purare sandstone district. The valuable mineral osmium has been found from the Gira River to the Owen Stanley Range.

During the year 1902-3 gold to the value of £ 40,322 was exported from the Protectorate, most of which was obtained by alluvial mining.

PORT MORESBY.

The seat of the Government of British New Guinea is at Port Moresby on the western shores of the Gulf of Papua, and about 380 miles from Cooktown, the nearest port on the Australian mainland. It is pleasantly situated on a double harbour, the minor portion of which, where there is good anchorage and excellent wharf accommodation, is known as Fairfax Harbour. Along the shores are some curious native villages, built, after the manner of the Malays, on

piles. These quaint clusters of native huts give the harbour a most picturesque effect. Most of the European settlement is on the southern and eastern sides of the outer harbour, and on an island in its waters. The population consists of about 2,000 natives and 50 Europeans. There are several springs, and the water for human consumption is stored in tanks. The Government Domain, containing the Government House, the barracks and quarters, is located on the slopes of the coast range. The principal buildings are, the Court House, Church, Government offices and mercantile premises.

SAMARAI.

Samarai, lying on an island at the south eastern extremity of the Colony, some three miles distant from the mainland, is the commercial centre of the Possession, and the European population is probably greater there than that at Port Moresby. The island was discovered by Capt. Moresby in 1873, and by him named Dinner Island. There is good wharf and storage accommodation, and, as it is the distributing centre for the gold mining industry as well as the collecting base for raw trading products, the port is a busy one. Frequent communication exists between Samarai and the Australian continent as well as with Port Moresby, and Tamata, the centre of the Mambara Goldfield on the North East Coast of the Possession.

Daru, the third port of entry and in British New Guinea, and the head quarters of the London Mission Society is best reached from Thursday Island.

GERMAN POSSESSIONS IN THE WESTERN PACIFIC.

It is only within comparatively recent years that the German Empire instituted a policy of colonial expansion in the Far East, and consequently at the present day her possessions there are not of any magnitude nor as yet of great commercial importance, although, as regards the latter attribute, the Government is making strenuous efforts to improve the trade and commerce of the groups under its administration. As far as the Melanesia is concerned, German possessions are limited to a portion of New Guinea and the Bismarck Archipelago, and a part of the Solomon Island group, while further afield in the Pacific Ocean she has the Caroline and Pelew Islands, the Mariane (or Ladrões) Islands (except Guam, which belongs to the U. S. A.), and the Marshall Islands, and in Polynesia, Savaii and Upolu, the largest of the Samoan or Navigator Islands. In the present section however it is necessary to deal only with that portion of the Pacific dependencies coming within the sphere and influence of German New Guinea and the Bismarck Archipelago.

AREA AND BOUNDARIES.

The total area of the German Possessions in Melanesia amounts to approximately 238,750 square kilometres, by far the greater portion falling to the mainland of New Guinea, of the total area of which it occupies about 28,3 %, the rest being divided between Netherlands with 48,6 %, and Britain with 23,1 %.

German New Guinea, or Kaiser Wilhelms Land as it is more usually called, occupies a parallelogram on the north-west coast of the island, running in a south-easterly direction from 148° E. to 141° E. longitude to the boundary of the Dutch possession, its southern boundary being British New Guinea. Its area, including adjacent islands, is estimated at 181,650 square kilometres.

The Bismarck Archipelago, which is comprised principally of the islands of Neu Pommern, formerly known as New Britain, Neu Mecklenburg (formerly New Ireland), Neu Hannover, The Admiralties, and a number of smaller groups and solitary islands lying in the German sphere of influence

south of the equator, between the longitude 141° and 156° E. longitude, excepting those belonging to the Solomon group.

The area of this Archipelago is estimated at about 50,000 square kilometres.

The German Solomons, comprising Bougainville, Buka, and some adjacent islands on the northern portion of that group, is the least extensive part of German Melanesia, its total area being estimated at about 8,000 square kilometres.

CLIMATE AND RAINFALL.

Lying entirely within the equatorial region, the climate of New Guinea and the Bismarck Archipelago — it is scarcely necessary to say, is hot and humid, the prevailing winds being the south-east trades, which blow from about May until October or November, when they yield to the north-west monsoon. The seasons may be roughly divided into the comparatively dry period of the south-east monsoon, and the rainy west or north-west monsoon. The average of rainy days is about one in three, the annual rainfall being about 150 inches on the seaboard and far more on the highlands where the moisture-laden clouds are first intercepted. The least healthy season is that of the variable winds accompanying the monsoon.

On the mainland of New Guinea the mean annual temperature has been computed at about 26° C. (79° F.), the lowest temperature recorded in the shade being about 20° C. (68° F.), the highest about 35° C. (95° F.). These readings may also be taken as a fairly correct average for the whole of the Bismarck Archipelago and the Northern Solomons.

HEALTH.

The most serious drawback of the coastal districts of the greater portion of the Possession is the prevalence of malaria fever, by which nearly all Europeans as well as natives are affected. This fever, the infection of which is spread by the anopheles, a peculiar species of mosquito, occurs in more or less severe forms, and occasionally terminates fatally. The missionaries of the Neuendettelsau Mission, residing on the Sattelberg near Finschhafen, at an altitude of 900 m. (2,853 feet), experience an immunity from this disease, and it is supposed that no fever exists in the higher elevations. Dysentery also occurs in the coastal regions, but other serious diseases such as cholera, scarlet fever, smallpox etc. are fortunately absent.

PHYSICAL FEATURES.

The coastline of the German territory on the mainland, the length of which is estimated at about 800 kilometres, is fringed by coral reefs and a line of large and small islands, and is indented by several fine bays, of which the two largest are the Huon Gulf and the Astrolabe Bay. There are also a number of excellent harbours, Friedrich Wilhelmshafen in the Astrolabe Bay ranking first from every point of view.

The island in general and the German territory in particular is very mountainous, and the most prominent feature of its configuration, especially on the east coast, are the magnificent mountain ranges which in places rise steeply from the narrow fringe of low coastal lands. The highest ranges are visible from the Astrolabe Bay, which itself is enclosed by a coastal chain averaging about 1,000 metres in height, and are in order named: the Finisterre, the Kraetke, and the Bismarck Range. The former, the nearest to the coast, attains a height of 3,475 metres, while of the two latter, which are still practically unknown, no correct measurement is as yet available. They are however estimated to reach altitudes of up to 5,000 metres or more. Snow-capped mountains and volcanoes are reported to have been seen in the interior.

The chief rivers are the Ramu and the Kaiserin Augusta River. The Ramu, which is navigable for a great distance, was discovered by an expedition in 1896. A later expedition showed its identity with the Ottilien River, and ascended the stream in the "Johann Albrecht" to a distance of 110 miles. The Kaiserin Augusta River, flowing into the sea some distance above Potsdamhafen, is also navigable for larger vessels, and has a favorable entrance. Of the smaller rivers the Cogol and the Markham may be mentioned. The first flows into the Astrolabe Bay, the last named into the Huon Gulf.

The Bismarck Archipelago consists in a **great** measure of volcanic lands. Beginning with the northern point of Neu Pommern, — the Gazelle Peninsula, where there is an active volcano and several extinct cones, the igneous line stretches along the north-coast of the island, where several active volcanoes are met with, and continues through the islands of the New Guinea coast, nearly all of which are volcanic. The most fiercely active fire mountain is Vulcan Island, lying at a distance of about ten miles from the New Guinea coast, in (approximately) 4° S. latitude and 145° E. longitude. From this beautifully shaped peak, which has an elevation of about 5,000 feet, dense columns of smoke issue constantly, and lava streams

may often be noticed rolling down its sides. Near this cone are Aris and Blossville, extinct craters, distinctly showing their volcanic nature, while Lesson Island, lying between the two, is still active. Peterhafen, in the group known as the French Islands, also bears unmistakable evidence of plutonic origin, and in the centre of the large Island of Tani in the Admiralty Group is an erupted mass, 2,970 feet high.

The waters of the Archipelago have undoubtedly often been the scene of violent volcanic disturbances, and within historic times several severe outbursts are recorded both at Dampier and Ritter Island. In 1888 the explosion of the last named little island caused an enormous tidal wave, which did great damage on Rock Island, and annihilated an expedition on the west-coast of Neu Pommern.

With unimportant exceptions the islands of the Bismarck Archipelago are mountainous in character, the highest peaks of Neu Mecklenburg, which is traversed for almost its whole length by a chain of mountains, attaining altitudes of more than 1,200 metres, elevations which are probably exceeded considerably by some of the mountains of Neu Pommern.

A number of good harbours are formed by the indentations of the larger islands, especially on the northern extremity of Neu Pommern, known as the Gazelle Peninsula, where Blanche Bay, and particularly Simpson Hafen, a completely land-locked harbour, forms a safe and spacious anchorage.

There are of course a large number of mountain streams on all the large islands, the principal known being the Holmes River on the Gazelle Peninsula. So far no river suitable for purposes of navigation has been found in the Archipelago.

The islands Buka and Bougainville in the Solomon group, are both mountainous, the former in a lesser degree, but the latter consisting of a continuous igneous range of great height, with Mount Balby (10,170 feet) as its culminating point. Bagana, in the central part of the island, still ejects smoke and ashes. There are some good reef-protected harbours on the coast, which are occasionally visited by trading schooners, but the interior has so far remained untrodden by European feet.

FAUNA AND FLORA.

Both on the mainland and in the Archipelago an abundant rainfall together with a high and equable temperature, has produced a vegetation of exceptional luxuriance and great variety. While in places extensive areas of grass plains ("along") are found, the hillsides and lowlands are, for the

greater part, covered with impenetrable forest, containing timber trees of considerable size and utilitarian value.

Taros (*Colocasia antiquorum*), and, to a lesser degree, yams (*Dioscorea*), bananas and other fruit are cultivated by the natives in all parts of the Papuan Islands, while on the mainland sago forms a staple food of the inhabitants. Sago palms grow wild in the bush, the variety from which the sago is obtained (*Saguerus Rumphii*), being of moderate size, with a trunk somewhat resembling a bamboo in appearance. Until the end of the flowering period, the hollow interior of the trunk is filled with a starchy mass, from which the growing fruit draws its nourishment. The tree is felled by the natives, the pulp scraped and washed, during which process the sago is separated and sinks to the bottom. Coconuts also form an important food factor, and groves of that valuable palm are found nearly everywhere on the coast.

As is also the case with the flora, the fauna of the Papuan Islands, and especially of the mainland, leaves much for the naturalist to explore, and there is no doubt that a great many varieties even of larger animal life yet remain to be discovered. It may however be said that the mammalia of the mainland of New Guinea, which resemble those of the Australian continent, are — with the exception of two species of bat and a species of wild pig (*Sus papuensis*), restricted to marsupials, comprising among others the kangaroo (two species of which are tree climbers), the wallaby, a small species of dingo, several species of cuscus, a flying opossum and echidnae. No carnivora have so far been discovered, and there is every reason to believe none exist on any of the islands.

The avifauna presents a great contrast to the mammalia and offers a large variety of new forms peculiar to Papua (nearly 900 species of Papuan birds being known), among which numerous species of the bird of paradise are particularly notable for the richness of their plumage. The largest representative of bird-life is the cassowary (*Casuarius Beccarii*) which occurs both on some of the larger islands of the Archipelago as on the mainland, and somewhat resembles the Australian emu. Among other remarkable birds are the beautiful crowned pigeon (*Goura coronata*), the gigantic hornbill (*Buceros ruficollis*), and the black cockatoo (*Microglossus aterrinus*).

The insect world includes some large and gorgeous butterflies, which are most plentiful during the rainy season. Crocodiles, and snakes, among which several poisonous varieties, frogs and turtles comprise the reptiles, while fish are numerous both on the coast and in the rivers.

POPULATION.

As little is known as yet of the interior of the large Islands, the number of the population must for the present remain a matter of conjecture, though the estimated number of 360,000 for the whole German Melanesian Possession, is perhaps not far from the mark. The population of the Archipelago and Solomon Islands is estimated at 250,000, or 4,4 per square kilometre, while Kaiser Wilhelms Land, which is less densely populated, is estimated to have a population of 110,000, or 0,6 per square kilometre.

The number of Europeans and other foreigners resident in the protectorate in January 1902 totalled 301, of which number 204 fall to the Bismarck Archipelago, and 97 to Kaiser Wilhelms Land. The following nationalities were represented:—

German	207
British.....	39
Dutch.....	20
French.....	7
American.....	6
Austrian.....	5
Scandinavian	2
Spanish	1
Other Nationalities	11

NATIVE INHABITANTS.

Although generally spoken of as Papuas, a name given to the natives of New Guinea by Jorge Meneses, the Portuguese navigator, and which is probably derived from the Malay word pua-pua, i. e. curly haired, the inhabitants of the mainland and archipelago are not homogeneous, but consist of a number of races differing totally from each other in appearance, customs and language. Even on the mainland, where racial distinctions are less marked, the various tribes have little in common with each other, and, according to Doctor Hollrung, the range of a dialect rarely extends over more than eight miles on the coast and still less in the interior, so that neighboring tribes are often quite unable to understand each other.

Instances of this kind are noticeable in the Astrolabe Bay, where between Juno Point and Cape Croisilles nearly every village has its distinct language. This circumstance, while it materially impedes the intercourse with the inhabitants, has the advantage of preventing any concerted

hostile movement against European settlers, the more so as the natives, even when not actually engaged in tribal wars, distrust each other in that land where every hand is lifted against his neighbor.

Cannibalism is practiced in most parts of the Possession, more especially in the Solomon Islands Buka and Bougainville, and New Ireland, where the natives appear to be of a more warlike nature than those of the New Guinea coast. Indeed the coast tribes of Kaiser Wilhelms-Land have given but little trouble, and of the inhabitants of the interior little or nothing is known. To a tribe to the westward of Berlinhafen head-hunting is however attributed, a custom which is also in vogue in the northern Solomons.

In outward appearance there is a great dissimilarity not only between the inhabitants of the different islands, but also among the tribes of the mainland. Some of the natives of Kaiser Wilhelms Land have a distinct Semitic cast of feature, and are of a rather lighter color than the inhabitants of the Archipelago, especially those of the northern Solomons, where the darkest race of the Pacific is perhaps to be found. In size also the Papuan of the mainland exceeds the islander, and here again it is the Solomon islander who is the shortest in stature, though the most warlike.

The clothing — if that term may be used — is everywhere of the most primitive simplicity and never exceeds in size a grass loin covering. In most instances the men wear a narrow bandage of bark cloth, while on some islands, as in some of the Solomons and the French Islands, even that brief covering is dispensed with. The women on the other hand are generally attired in a grass girdle, often skillfully manufactured, and tastefully colored, but here again the fashion varies, and in certain districts little or nothing is worn. But an unsparing use of ornaments generally compensates for the scanty apparel, especially with the men, who in this respect far outshine the women. An endless variety of bracelets, necklets, nose and ear-ornaments, hair combs, feathers etc. are worn by the natives of the different islands, while several color-earths are used for further beautifying the person. Some of these ornaments, as well as weapons and domestic utensils, which of course vary in their make in every tribe, are most delicately carved, and it is the exception rather than the rule to find articles of coarse manufacture. The principal weapons in use on the mainland are the bow and arrow and the throwing spear, with the use of which latter the

natives in the neighborhood of Potsdamhafen are particularly proficient. To these is added in New Britain the stone-headed club, and in New Britain and the French Islands, the sling, a most formidable weapon in the hands of an expert thrower. In the Admiralties, spears and daggers are tipped with obsidian; and in the Exchequer, Hermit, Mali and other islands the weapons, as well as the straight-haired and light-skinned inhabitants, are probably of Micronesian origin.

The spears and arrows used in the Solomons are said to be poisoned, but inquiries into the matter have revealed the fact that the poison — if it exists at all, is not of a deadly nature, and that tetanus resulting from an arrow wound is usually due to a piece of the bone point remaining in the wound, aggravated further by the tropical climate and the imagination of the wounded man.

About the manners and customs of the natives little can here be said, as they naturally vary in different parts of the Possession. On the whole the women do the hard work, such as tilling the ground and looking after domestic affairs, while the occupation of the men is hunting, fishing and preparing weapons.

Unarmed strangers are generally hospitably treated in places where no grievance exists against Europeans, as was the case with the Russian naturalist Maclay, who lived among the natives of the Astrolabe Bay for a year. But that it is by no means safe to always rely on their peaceful disposition has been shown by a number of regrettable massacres of peaceful naturalists, missionaries and traders. In fairness to the natives it must however be said that occurrences of that nature are usually the outcome either of fear, gross violations of their customs, mistaken zeal on the part of missionaries, or acts of retribution for former real or imaginary injuries inflicted on them by unprincipled Europeans, for which, according to their rudimentary ideas of justice, the first white man must pay the penalty.

LANGUAGE.

The official language within the Possessions is of course German, but English is also spoken, or at least understood by all European residents in the Protectorate. In the intercourse with the natives, whose diversity of dialects necessitates the adoption of a uniform language, a ludicrous form of speech known as "Pidgin English" is used, which resembles somewhat its namesake of the China coast. But although

it is deplorable that, while the easily learned Malay language might be introduced with advantage, this unlovely dog-English should still be encouraged, the quaint expressions promptly invented by the natives for anything new to them, amply demonstrate their ready wit, and furnish a constant source of amusement, especially to the new arrival.

HISTORY AND DISCOVERY.

The island of New Guinea has been known to Europeans since the beginning of the sixteenth century, the first reference to its existence being made by the Portuguese Francisco Serram and Antonio D'Abreu, who, in an account of their travels, describe what was probably a portion of the south-west coast, where they touched in 1511. The first authentic record however was furnished by the Portuguese navigator Jorge Meneses, who, in 1526, while voyaging from Malacca to the Moluccas, was driven out of his course and reached the north coast of the great island, which he called Papua, and where he remained a month to refit his vessel.

Two years later, the island was again visited by Saavedra, a mariner of the same nationality, by whom it was given the name of "Isla del Oro" — golden island, and in 1546, the Spaniard Ynigo Ortiz de Retes sailed along its northern coast and called it "Nueva Guinea", from a fancied resemblance to the Guinea coast of Africa.

Throughout that century different Portuguese and Spanish navigators brought home word of the island, and travellers' tales began to circulate concerning its supposed wealth of precious metals and its richness in vegetable productions.

During the seventeenth century, in the beginning of which (1606) the Spaniard Luis Vaes de Torres claimed the southern coast of New Guinea for his sovereign, the Dutch took an active part in the exploration.

Shouten and Le Maire in 1616 discovered what is now known as the Bismarck Archipelago, noticing a number of active volcanoes; and twenty seven years later Tasman ultimately examined part of the west coast.

With Dampier, who sighted New Guinea on New Year's Day 1700, and completely circumnavigated it in the Roebuck, the first English navigator to visit the island appeared on the scene. Others followed in the same century; the first detailed description of the country being furnished by Forrest, who visited Doreh and the island of Waigiu for the British East India Company in 1774. From about that time

the island was more frequently visited, French navigators such as d'Entrecasteaux, Dumont D'Urville and others participating in the honors of new discoveries; the latter, in the *Astrolabe*, named the Humboldt Bay.

By an agreement between England and Holland in 1824, the easternmost boundary of the latter's sphere of influence was fixed at longitude 141° E., but it was not until August 24th 1828, when Captain Steenboom in the *Triton* annexed the territory and founded Port Dubus in Triton Bay, that formal possession was taken. The newly founded settlement was soon abandoned owing to the unhealthiness of the climate and, although several attempts have since been made to form permanent settlements, the result has so far been crowned with but little success, and at the present time, if the fort at Merauke on the south coast, and the little trading village of Doreh on the north coast be excepted, there are no settlements on the Dutch portion of the island.

In the year 1871 the London Mission Society began operations near Port Moresby, and the Russian Scientist Micklucho-Maclay landed at Bongu near Constantinhafen (Stepansort), where he stayed until 1872. He explored the neighborhood of the Astrolabe Bay, and furnished the first account of the manners and language of the natives. In the following year the narrow neck between the Mac Cluer and Geelvink Bay was crossed by the German Dr. Meyer, and Captain Moresby in H. M. S. "*Basilisk*" discovered the port which is now called after him, as well as the islands Moresby, Mourilyan and Hayter on the extreme south-east point of New Guinea, the latter of which he annexed for England.

The attention of German trading firms had by that time been drawn to this quarter of the globe, and in 1874, during which year the annexation of New Guinea was urged in Australia, the first trading station was established on the island of Matupi in the Blanche Bay by the Hamburg firm of Goddefroy. The first Wesleyan mission station was established in the same year at Port Hunter in Neu Lauenburg. The trading station had to be abandoned owing to the hostility of the natives, but a new station was opened by the same firm in Nodup on the mainland in the following year. In 1876 Captain Hearnstein established the first trading station on Makada in Neu Lauenburg, from where it was later transferred to Matupi.

In 1875 Captain v. Schleinitz in the German warship "*Gazelle*", from which the Gazelle Peninsula takes its name, explored the Bismarck Archipelago, adding considerably to the knowledge of that group of islands.

In 1882 the notorious expedition of the "Marquis de la Ray" arrived in New Ireland. This French nobleman had induced a large number of peasant families, chiefly from Normandy, to invest their savings and to emigrate for the purpose of forming a settlement, to be known as New France, in these islands, which were described in the most glowing terms. The deluded emigrants were landed with scanty provisions in a most unsuitable part of the island, where famine and sickness soon made their appearance among them, and where many of them found an early grave at the hands of the natives. The Catholic Mission Station at Lawollo on the mainland of Neu Pommern was founded by priests forming part of that ill-fated expedition.

A new area in the history of German New Guinea commenced when, in 1884, the New Guinea Company, with privy councillor v. Hansemann as its head, was formed in Berlin, and the territory of the north coast of the mainland east of the Dutch boundary as well as the Archipelago was annexed by the German Government. A month previously the British flag had been hoisted on the south coast. In the same year also the German naturalist Dr. Finsch explored portions of the north and south coast of New Guinea. The development of the country was placed in the hands of the New Guinea Company, who received the Imperial Charter in 1885, which was retained until 1899, when the administration was taken over by the Imperial Government.

In the meantime the trading and planting operations had progressed in Blanche Bay; the Ralum Plantation, the first, and even now the finest in the territory, being started in 1882. The New Guinea Company commenced work on the mainland, where Finschhafen became the site of the first establishment. But when, in 1891, after an unusually dry season, a malaria epidemic caused the death of eight officials, including the Director-General, the headquarters were removed to Stephansort in the Astrolabe Bay, only to be again transferred to Friedrich Wilhelmshafen, some miles to the westward, where it is now.

BIBLIOGRAPHY.

While of the early discoveries a number of works are available, modern literature of the German New Guinea Possessions is restricted to the German language. In Romilly's "Western Pacific", which however dates back to 1886, a short account of the Astrolabe Bay is to be found,

as well as of the manners and customs of the natives of New Britain and New Ireland, which apply almost equally well to present conditions.

GOVERNMENT.

The supreme authority of the Protectorate is vested in a Governor, whose seat is in Herbertshöhe. District Magistrates are stationed at Herbertshöhe and Friedrich Wilhelmshafen, in both of which places district courts are held. The Supreme Court is also at Herbertshöhe.

DEFENCE.

A gun boat is usually stationed in the Archipelago, and the Government steamer, manned by Norddeutscher Lloyd officers, is further available in case of disturbances. Both at Herbertshöhe and Friedrich Wilhelmshafen there is a body of police composed chiefly of Solomon Islanders, officered by Europeans. These troops are maintained for defensive purposes and form the principal strength of punitive expeditions. European militia there is none.

CUSTOMS.

Import duties are charged on fermented and spirituous liquors only, the tariff being roughly as follows:—

Beer, 20 pfennigs for 150 centilitres; Wines, from 40 to 80 pfennigs for 150 centilitres; Spirits, 80 pfennigs per litre.

On copra an export duty of 4/— per ton is levied.

POSTAL AFFAIRS.

Post Offices are situated at Friedrich Wilhelmshafen, Stephansort and Berlinhafen on the mainland, and Herbertshöhe, Matupi and Nusa in the Bismarck Archipelago. The postal regulations are similar to those obtaining in other parts of the Empire, the transmission of money orders and parcels to nearly all parts of the world being provided for at the principal offices. The rate for money orders to Germany are 10 pfennigs for sums up to 5 marks, 20 pfennigs for sums up to 100 marks, 30 pfennigs for sums up to 200 marks, and 40 pfennigs for sums up to 400 marks, which constitutes the highest limit. The rate for Great Britain and colonies is 20 pfennigs for each 20 marks or part thereof; the amounts that may be sent in this manner being limited as follows:—

Great Britain and Ireland 210 marks; British India £ 20; Canada \$ 100; Australia (continent) 400 marks; Tasmania 210 marks; Other Colonies £ 10. To the United States of America, the rate of charges is the same, the highest sum accepted for transmission being \$ 100.

Parcel rates to Germany are, via Bremen, 1.60 marks for any weight below 1 kg, 2.40 marks for any weight up to 5 kg, and 3.60 marks for any weight not exceeding 10 kg. To British India, Burma, the Indian post offices in Persia, Asia Minor and Arabia, as well as to the French and Portuguese possessions in India, the rate is 5 marks for parcels not exceeding 5 kg in weight; to Aden 4.20 marks.

A parcel service to Australia, Straits Settlements and Netherlands India will shortly be inaugurated. Parcels to other parts of the world are sent via Germany.

Ordinary letters are 10 pfennigs to any part of the German Empire and 20 pfennigs to any other part of the world. Letters not exceeding 20 grammes in weight are 10 pfennigs, and those not exceeding 250 grammes, 20 pfennigs to any part of the German Empire and Austria-Hungary, those to any other part of the world 20 pfennigs for each 15 grammes, or part thereof (Switzerland 20 pfennigs for each 20 grammes).

Special New Guinea postage stamps for use in the Protectorate are issued in values of 3, 5, 10, 20, 25, 30, 40, 50 and 80 pfennigs, and 1, 2, 3 and five marks.

There are no telegraph lines in the Protectorate.

CURRENCY.

Throughout the Possession, German and New Guinea currency with the mark (100 pfennigs) as its unit, forms the legal tender, though English gold and silver is usually accepted at the rate of a shilling for a mark.

The New Guinea coins, which bear on their face a representation of a bird of paradise, were struck by the New Guinea Company during its administrative period; the following values being issued:— Gold, 20 and 10 mark pieces; Silver, 5, 2, 1, and $\frac{1}{2}$ mark pieces; bronze, 10 pfennig pieces; copper 2 and 1 pfennig pieces. Of the above, the gold coins are now extremely rare and are sold at a premium, while the lower values are still in circulation.

Among the natives of Neu Pommern small white cowrie shells threaded on strips of cane and known as "dewarra", forms the most highly priced medium of interchange, a fathom length of this peculiar coin being reckoned equal to about three shillings in value. Curiously enough, though the shell abounds everywhere, a tribe in the vicinity of Cape

Lambert appears to have the monopoly of manufacturing and, "as natives are the most conservative people in the world", says H. J. Romilly in his "Western Pacific", "no other tribe has ever attempted to issue what might be regarded as base money".

From the same book the following is quoted:— "The farther one gets to the westward the more valuable this shell money becomes, which seems to bear out the theory that it comes from the east. When it is issued from the mint, each piece of money has some thirty feet in length. A species of vine is selected, from which a single thread of that length can be obtained, and on this the shells are strung as close together as possible. An inch of dewarra contains about twelve shells, so that each perfect piece of money would have not less than 4,320 of them.

As the dewarra becomes distributed about the country, it is cut up in such sizes as may be required. One fathom — that is to say, the extreme stretch of a man's arms — is the recognised amount by which all payments are measured. In most places a pig is worth seven fathoms; the same price is put on a man's life".

MISSIONS.

Six Christian Missions (three Protestant and three Catholic), are established in German Melanesia, their respective stations being as follows:—

Bismarck Archipelago: The "Australian Methodist Missionary Society", at Port Hunter, Raluana and Kabakada; The "Sacred-Heart Mission" (Catholic) at Vuna Pope, Vlavolo, Malagunan, Villa Maria or Takabur, Nodup, Vuna-Kamkabi, Paparatava, Vunamarita, Ramandu, Bitagalip or St. Otto, Matupi, Watoni and St. Paul (Baining).

Kaiser Wilhelms-Land: The "Neuendettelsau Mission" (Lutheran) at Simbang, Tami Island, Sattelberg, Deinzerhöhe; The "Barmen Mission" (Lutheran) at Bongu, Siar, Bogadjim, Ragetta; The "Mission Society of the Word of God" (Catholic) at Regina Angelorum, Tumleo and Ali in Berlinhafen, and Potsdamhafen.

Solomon Islands: The "Marist Mission" at Kieta on the island of Bougainville.

COMMERCE.

In the year 1900 the total value of imports into the New Guinea Protectorate amounted to 1,618,607 marks, and the value of exports to 1,119,399 marks, a sum considerably in advance of previous years. The greatest portion of the

trade falls to the Bismarck Archipelago, which was responsible for 1,240,925 marks of the imports, and 907,282 marks of the exports, while the imports into Kaiser Wilhelms-Land amounted to 377,682 marks, and the exports to 212,117 marks.

The chief articles of export are in the order named, copra, pearlshell, trepang, and cotton, and to this list was until recently added tobacco, the growing of which has now been discontinued.

The imports consist chiefly of foodstuffs, liquid and tinned, of which 485,311 marks' worth were imported in the year under review, machinery and iron ware (309,899 marks), building materials (178,488 marks), tobacco etc. (175,695 marks), textiles and clothing (157,915 marks), leatherware (76,374 marks), and sundries (234,935 marks).

AGRICULTURE.

Of all the island groups in the Pacific Ocean, perhaps none offers conditions equally favorable for agricultural pursuits than does the north-coast of New Guinea and the Archipelago. Lying outside the cyclonic belt, those devastating storms, which are largely responsible for the failure of crops in Polynesia as well as in some of the groups north of the line, need not to be reckoned with here, and a greater fertility of the soil and the cheapness of labor further helps to make this part of the Pacific particularly well fitted for tropical cultivations. Coconut growing especially proves most profitable, as is shown by a number of plantations on the north coast of the Gazelle Peninsula in Neu Pommern; the Ralum Plantation being a particularly good example of what can be done in this respect.

The mainland of New Guinea has so far remained unexploited, and, with the sole exception of the New Guinea Company, whose planting operations until recently bore a more or less experimental character, and are even now merely in their infancy, no planting or trading firm is established there. When the first headquarters of that Company (Finschhafen) were abandoned owing to its unhealthy climate, plantations were started in Stephansort and at Jomba, near Friedrich Wilhelmshafen, which is now its principal station.

Tobacco was first planted and grew well, but, though of excellent quality, it proved unprofitable, and the attention of the Company has now chiefly been turned to coconuts and rubber, of which latter the varieties known as *Ficus Elastica* and *Castiloea* are principally cultivated. In the year ending 1900, tobacco to the value of 119,360 marks was

exported, but since the abolition of that branch of agriculture the exports from the mainland are unimportant, and consist chiefly of a little copra, capok, and some timber for cabinet purposes.

The principal agricultural centres in the Protectorate are, as has been said, the shores of the Blanche Bay in the Gazelle Peninsula, and Nusa on the north end of Neu Mecklenburg. Coconuts are the staple product, while cotton, capok, coffee and cocoa, which also grow well, are at present less extensively cultivated.

Coconut planting offers a wide and profitable field for capital, but cannot be recommended to those who must look for a quick return for their money, unless carried on in conjunction with other pursuits such as trading, and the growing of minor products for the Australian market.

The following estimate for planting an area of 500 hektars (about 1,235¹/₂ acres) with coconuts, and its upkeep for six years, has been translated from an official pamphlet, and is applicable to any coastal land within the Protectorate:—

1. Cost of land (500 hektars) ..	2,500 M.	(about £ 125)
2. Surveying fees etc., about ..	1,000 M.	(£ 50)
3. Boats:— one decked cutter and one rowing boat	6,000 M.	(£ 300)
4. Cost of maintaining same for six years	1,800 M.	(£ 90)
5. A six years' supply of planta- tion tools, comprising spades, hoes, knives, and axes, as well as an outfit of car- penters' tools	1,800 M.	(£ 90)
6. Recruiting fee for 50 laborers for a contract of three years	5,000 M.	(£ 250)
7. Further 50 laborers for next three years	5,000 M.	(£ 250)
8. Wages of laborers (6,— per month each)	21,600 M.	(£ 1080)
9. Cost of 5000 coconuts	1,500 M.	(£ 75)
10. Buildings:— dwelling house, store house, boat house, workshop and houses for laborers	10,000 M.	(£ 500)
11. Salary of an assistant, 200 M. per month and free board and lodging	14,400 M.	(£ 720)
12. Cost of living including assistant	18,000 M.	(£ 900)
total ...	88,600 M.	(about £ 4430)

COCONUT GATHERING
MALAPAU PLANTATION, GAZELLE PENINSULA.

This estimate covers a period of six years. In that period an area of 500 hektars of grassland (along field) can be put under coconuts with 50 laborers. The first work of planting is quickly done, but subsequent clearings occasion great delay. The cost of feeding laborers is covered by the proceeds of by-products, and need not therefore be considered.

The above estimate may be considerably cheapened and savings may be effected as follows.—

If sufficient oversea communication exists the cutter becomes unnecessary	6 200 M.	(about £ 310)
A portion of the laborers, perhaps half of them may agree to serve for a further term	2 500 M	£ 125
Friendly relations with neighboring tribes may induce 25 of them to contract as laborers	2 500 M	£ 125
The cost of living may be cheapened by adequate planting of food-stuffs	6 000 M.	£ 300
Trade with the natives may bring a yearly profit of say	1 000 M	£ 50
total	23 200 M	(about £ 1160)

The same result may, therefore, under favorable circumstances, be attained with 25 000 marks and even an experience has shown with a comparatively small capital if trading operations are carried on successfully. Accidents as for instance an outbreak of disease among the laborers, loss at sea, and severe damage to the plantation so far unprecedented may of course retard progress.

The acquisition of cattle has been omitted from the estimate. When coconuts are grown, cattle should not be run on the plantations during the first four years when the young trees are liable to damage. Pastoral pursuits here require a cautious policy and local experience. In the seventh year the first crop may be expected. The net profit from each hectare of 100 are reckoned to the hektar, is computed at 1000 per year. 2000 to 2500 nuts make a ton. 1000 of marketable coconuts and a each tree carries on an average 20 nuts per year with a normal rainfall. 2000 nuts make a ton. The gross profit of one hektar is 2000 marks. The gross profit of 100 hektars is 240 marks to 300 marks. The net profit of 100 hektars is 240 marks to 300 marks.

THE
C

a

S
C
i
s

This estimate covers a period of six years. In that period an area of 500 hektars of grassland (along field), can be put under coconuts with 50 laborers. The first work of planting is quickly done, but subsequent clearings occasion great delay. The cost of feeding laborers is covered by the proceeds of by-products, and need not therefore be considered.

The above estimate may be considerably cheapened, and savings may be effected as follows:—

If sufficient oversea communication exists, the cutter becomes unnecessary.....	6,200 M.	(about £ 310)
A portion of the laborers, perhaps half of them may agree to serve for a further term	2,500 M.	(£ 125)
Friendly relations with neighboring tribes may induce 25 of them to contract as laborers	2,500 M.	(£ 125)
The cost of living may be cheapened by adequate planting of foodstuffs.....	6,000 M.	(£ 300)
Trade with the natives may bring a yearly profit of, say	1,000 M.	(£ 50)
total...	23,200 M.	(about £ 1160)

The same result may therefore, under favorable circumstances, be attained with 65,400 marks, and even, as experience has shown, with a comparatively small capital, if trading operations are carried on successfully. Accidents, as for instance an unusual death rate among the laborers, loss at sea, and severe damage to the plantation (so far unprecedented) may of course retard progress.

The acquisition of cattle has been omitted from the estimate. When coconuts are grown, cattle should not be run on the plantation during the first four years, when the young trees are liable to damage. Pastoral pursuits here require a cautious beginning and local experience. In the seventh year the first crop may be expected. The net profit from each tree, of which 100 are reckoned to the hektar, is computed at 1 mark per year. 7,000 to 8,000 nuts make a ton (1,000 kg) of marketable copra, and as each tree carries on an average 80 nuts per year with a normal rainfall, 8,000 nuts would be the yearly product of one hektar with 100 trees. The price of copra is at present 240 marks to 300 marks, which leaves a clear profit of

100 marks per year and per hektar if the expenses are reckoned at 140 marks per ton; probably a rather high estimate for a private plantation.

Keeping the 50 laborers, and allowing for the cost of an additional assistant, the renovation of the buildings after the tenth year at a cost of 10,000 marks, and taking into consideration the packing and shipping expenses at 40 marks per ton, a commercially exact calculation may be made of the results of the seventh, eighth, and each successive year. The first crops are small, and may be estimated to yield only 4,000 marks. After fourteen years at the latest the plantation is in full bearing, and with the present prices of copra and labor, a yearly profit of between 40,000 marks to 50,000 marks (£ 2,000 to £ 2,500) may be reckoned on.

OTHER PRODUCTS.

The natural products of the Protectorate have as yet been but little exploited, but there are without doubt many valuable sources of profit still awaiting development. Timber of great variety and excellent quality exists in inexhaustible quantities, but although there are small sawmills — one belonging to the New Guinea Company at Erima in Kaiser Wilhelms Land, and one (Catholic Mission) on the Gazelle Peninsula, only small quantities of timber for cabinet purposes have so far been exported.

Pearlshell and trepang (*bêche-de-mer*) are also found, a small English company being engaged in this industry. Operations are carried on in the Admiralties and on the south coast of Neu Pommern, but every possibility exists for the finding of remunerative fishing grounds in other parts of the Archipelago.

Though traces of valuable minerals, such as for instance gold (on the mainland) and coal (in Neu Mecklenburg), have been found, and further discoveries may be expected, there has so far been little to warrant commercial exploitation in the face of the many difficulties that beset the mining pioneer, but as the opening of the country progresses and exploration becomes less difficult, valuable mineral deposits may confidently be expected.

SPORT.

It is hardly to be supposed that a sportsman would expect satisfaction in a country such as has been described, where game presents no great variety, and, if the bird life be excepted, no remarkable new features. The naturalist will

however find much to interest him, and a good collection of birds may be shot en passant, especially at "Erima" in the Astrolabe Bay, one of the inter-island steamer's ports of call, and where the settlement consists merely of a sawmill, standing on the edge of the primeval forest. Sea fishing can of course be had at any part of the coast, and at Blanche Bay numerous sea turtles may at times be seen. Crocodiles are plentiful in the rivers and creeks, and are at times killed for food by the natives.

No restriction is placed on the shooting of any game with the exception of the bird of paradise, for the shooting of which it is necessary to obtain the sanction of the authorities. The bird of paradise license varies from 100 M. (£ 5) per annum to 20 M. (£ 1) for temporary residents in the Protectorate.

TRAVELLING AND EXTERNAL COMMUNICATION.

A regular six-weekly communication with the Protectorate either way is kept up by a newly inaugurated line of steamers of the Norddeutscher Lloyd, trading between Australia and Asia, the nearest port of call on each continent being Brisbane and Hongkong respectively. (Vide Company's time table).

A regular inter-island service has also been established, the Norddeutscher Lloyd steamer Sumatra, plying at monthly intervals between the principal islands of the Archipelago and the Northern Solomons, while a small steamer of the New Guinea Co., and schooners of the different trading firms further effect a more or less regular communication between the islands and the mainland of New Guinea. The Government yacht "Seestern" also makes periodical tours to the different parts of the Possession, and intending passengers (subject to the sanction of the authorities) may avail themselves of that opportunity on payment of certain fixed charges.

The primitive conditions of civilization obtaining throughout the Possession, and the wild nature of the country, precludes touring in the ordinary sense of the word, with the exception of in the immediate neighborhood of the settlements. If longer overland tours are contemplated, local advice should be procured for the details of the expedition. Natives to act as carriers, as well as interpreters, can be obtained through the medium of any one of

the trading or plantation firms, for a wage of about sixpence per day and their food.

Trade goods, which may be necessary for the purpose of purchasing food and as presents, should also be procured on the spot, where the requirements of the natives are best known.

HERBERTSHÖHE.

Herbertshöhe, the seat of supreme Government of the German Possessions in the Western and Northern Pacific, is most picturesquely situated on the shores of Blanche Bay on the northern end of Neu Pommern in (approximately) $152^{\circ} 15'$ E. longitude and $4^{\circ} 20'$ S. latitude. It is the most important commercial centre of the Protectorate, several of the principal trading and planting firms making it their headquarters. For the visitor it has a more than usual interest as it affords him an opportunity of seeing some of the best coconut plantations in the Pacific, among which the Ralum Plantation, already mentioned, is especially notable. Coffee, capok and cotton may also be seen growing.

The climate of Herbertshöhe resembles that of other parts of the Archipelago, but malaria fever is less prevalent here than elsewhere, and when it occurs seems to be of a milder form.

On arrival the vessel anchors about half a mile from shore in the spacious Blanche Bay, which is sheltered on the west by a projecting point of the Gazelle Peninsula, and on the north and east by the islands of Neu Lauenburg and Neu Mecklenburg. The roadstead, though otherwise excellent, is however exposed to the north-west, and it is projected to transfer the port of entry to Simpsonhafen, a completely land-locked and spacious harbour a few miles further to the westward.

The shore is reached by means of the ship's boat which plies to and fro for the convenience of passengers.

There are two hotels at Herbertshöhe, the "Hotel Fürst Bismarck", and the "Hotel Deutscher Hof", the former being connected with the trading firm E. E. Forsayth, and the latter with the New Guinea Company.

The tariff at the "Hotel Fürst Bismarck" which is situated close to the landing pier and near the Government buildings is from 5 M. per day for room only, and from 10 M. with full board. 50 M. is charged per week, and 180 M. for monthly boarders.

The buildings of the settlement, excepting the private residences of the officials and Europeans engaged in

A JUNGLE PATH
ERIMA, KAISER WILHELMSLAND.

trade or other pursuits, comprise in the order named from west to east, the stores of Messrs. E. E. Forsayth, the Government buildings, the stores of the New Guinea Company, and M. Mouton, and the large Catholic Convent of the Sacred Heart Mission, which, situated on an eminence some little distance to the left of the landing pier, looks like a little township in itself. All houses are built of weatherboard, and are surrounded by broad verandahs, and the effect produced by their pure white color standing out prominently from the dark green background of the hills, is charming.

All manner of European requirements can be purchased at any of the stores, and a great variety of island curios can be had at the store of E. E. Forsayth, whose trading and recruiting vessels bring them from the most remote and little known places.

EXCURSIONS.

Though there are no native villages in the immediate neighborhood of the settlement to attract the tourist, visits to the different plantations will be found to be interesting. A twenty minutes' walk to the Catholic Convent, where visitors are always made welcome, and where an opportunity is afforded of witnessing the effect of civilisation on native children, should not be omitted, the road leading through the plantation of the New Guinea Co.

For longer excursions conveyances are necessary. Buggies (seating two persons) may be hired at the hotel; the charge being 3 M. per hour, but cheaper arrangements can be made if the vehicle is required for the day. Saddle horses are charged for at the rate of 15 M. per day, or 10 M. for the half day.

A steam launch seating ten persons, can be hired for excursions at the rate of 75 M. per day. A drive through the Ralum Plantation, which extends to a considerable distance inland and along the coast to the westward, will prove a most pleasant experience. The roads are good, and suitable for driving. The road to the Wesleyan Mission at Raluana (distance about one hour by buggy), where Fijian and Samoan teachers may be seen at work, also leads partly through coconut plantations.

A longer but most charming drive is that to Toma, a fort on the Varzin Mountain beyond the settlement. This military outpost, which is manned by the native armed

constabulary under the supervision of a European, was established after the massacre of the wife and children of a planter, in 1902. The climate at Toma, which lies at a considerable elevation, is more bracing than that of the coast, and is said to be free from malaria. It is expected that a sanatorium will be erected there as soon as practicable.

On the way to Toma the great banyan tree at Bita Rebareba, where cannibal orgies were formerly held, is passed.

Launch trips can be arranged to the island of Kabakon, where a vegetarian colony — as yet consisting of only a few members — has been established, or to Mioko, another island of the Neu Lauenburg Group, a distance of about 14 miles from Herbertshöhe. At Mioko, which has a most charming little harbour, a station of the Wesleyan Mission, and a branch of the principal trading and plantation firm of Samoa (Deutsche Handels- and Plantagen-Gesellschaft), are established, and numerous native villages may be seen. There is also a fine coral grotto with an entrance both from the sea and the shore.

On calm days the coral reefs with their great variety of form and color, should also be visited if time permits.

SIMPSONHAFEN.

On the northern shore of Simpsonhafen, and little more than an hour's walk from Matupi, is the newly established station of the Norddeutscher Lloyd. Here a wharf 875 feet in length, and capable of accommodating vessels of any size, has recently been constructed by the Company, and other preparations are in progress for the establishment of permanent headquarters at this point. The wharf, though considerably exceeded in length by one built by the natives of Wallis Island in Polynesia, is unique as being probably the largest wharf built for practical purposes in the Pacific Ocean.

A steam launch can be hired from the Chinese trader at Matupi at a fairly reasonable charge, and a pleasant day may be spent in exploring the shores of Simpsonhafen. Two curious precipitous islands, not unlike beehives, by which name in fact they are known, are within a short distance of Matupi in Simpsonhafen, and Vulcan Insel, an island which was thrown up during a severe earthquake in the year 1878, may also be visited.

MATUPI.

Matupi, a small island at the entrance of Simpsonhafen, a distance of about seven miles from Herbertshöhe, furnishes even more items of interest to the traveller. If Herbertshöhe is picturesquely situated, Matupi is much more so, lying as it does within gunshot of an active and still smoking volcano, while other extinct cones, notably the "Mother and Daughter" rear their heads near by. Matupi is distinguished as being the site of the first trading station in the Achipelago (1874), which however was soon abandoned owing to the hostility of the natives. A new firm which shortly afterwards opened a station on the same island (E. HERNSHEIM) still has its headquarters there. A Chinese trader is also established on the island. Of missions there is a Catholic mission station, and a sub-station of a Wesleyan Mission under the supervision of a Fijian teacher.

The island is, as has been said, small, and lies close to the Gazelle Peninsula, with which it is connected by a wooden bridge. There are several native villages, but the total population is considerably below 1,000.

Though the climate of Matupi naturally differs in no way from that of Herbertshöhe, the porous volcanic earth prevents the formation of swampy ground, and consequently a complete immunity from malaria fever is enjoyed by the inhabitants. The harbour is both sheltered and of sufficient depth to admit vessels of any size, but of no great extent, though several vessels could be comfortably berthed there at the same time. It boasts of a small quay with accommodation for vessels of moderate draught.

Several points of interest may be visited from Matupi, but it will be necessary to procure the service of a native to act as guide. Such boys can be hired for a small fee. The hospitality of Europeans in this region is proverbial, and visitors, who here are to a great extent dependent on the courtesy of the European residents, will find every assistance extended to them for the mere asking.

Among the most interesting sights in the neighborhood, besides the native villages on the island itself, are some hot sulphur springs, and a more or less active volcano of no great height on the opposite shore, a closer inspection of which offers no great difficulties. A ten minutes' row in the ship's boat, or a walk across the bridge lands one on the opposite shore, where in parts the sea water rippling on the beach is quite hot. After a comparatively

easy climb the lip of the crater is reached, and a magnificent panorama of the broad sweep of Blanche Bay stretches beneath the visitor; a view alone worth the trifling preliminary exertion.

FINSCHHAFFEN.

Finschhafen, so called after Dr. Finsch, an eminent German naturalist, lies to the northward of the Huon Gulf, in $6^{\circ}33'6''$ S. latitude and $147^{\circ}50'$ E. longitude. It was formerly the head station of the New Guinea Company, but abandoned in 1892 owing to unfavorable climatic conditions. Since then no progress has been made there. Some years ago it served as headquarters for a gold prospecting expedition, and now a European planter has again been stationed there by the Company. The trading station is situated on one of the small islets of the bay. Other islands, together with part of the thickly wooded shore, form the sites for several native villages, whose inhabitants break into animation whenever a vessel enters, and push off hurriedly in their frail and queer shaped canoes to exchange their curios for trade or money. Well carved bowls and coconut shells etc. from the Tami Islands are obtainable here.

A short distance to the south of Finschhafen is the Langemak Bay, where (at Simbang) a station of the Neuen-dettelsau Mission has been established since 1886. The Mission station lies on a little hill, about 200 feet in height, near the mouth of the Bubui River. Observations extending over five years at this spot fix the yearly average rainfall at 3,060 m. m. while the temperature varies between 25° and 31° C. (77 and 88 F.), but readings of as high as 37.5° C. ($99\frac{1}{2}$ F.), and as low as 20° C. (68 F.), have been observed.

If from Finschhafen the voyage is continued to the Astrolabe Bay, the shore is hugged so closely that a very curious formation of the coast extending for many miles becomes visible from the deck. The hillside looks like a huge staircase and, were it not for the gigantic nature of the landscape, it might readily be thought that men and not nature had a hand in the forming of it. One might imagine that some Titans of old had built it as a stairway for the gods. Beyond this coastal formation tower mighty forest-clad ranges, their summits lost in a misty vapor, while the country beyond is still shrouded in complete mystery.

STEPHANSORT.

Stephansort, some twenty miles to the southward of Friedrich Wilhelmshafen, in the Astrolabe Bay, was established in the year 1888, and constituted for a while the centre of operations for the New Guinea Company. Tobacco, of which in 1896 about 90 tons were produced, formed for some time the principal export, but rubber, gambier, rami, Liberia coffee and coconuts have now been planted.

Vessels anchor in the open roadstead, but, as a heavy surf at certain times of the year renders landing difficult, merchandise is generally shipped at Erima, a few miles to the northward of the settlement, with which it is connected by means of a bullock-tram.

The road from Stephansort to Erima leads through the forest, thus affording the passing traveller an opportunity of gaining an adequate idea of the wealth and brilliance of the New Guinea flora. The distance by land can be covered in two hours, and the walk is one long opportunity for filling the collecting cases of the botanist, the entomologist, or the bag of the sportsman. Dense, virgin jungle grows on all sides, furrowed in places by the tracks of the timber-getters. Along these tracks a world of strange things is to be seen: rare exotic blooms load the air with perfume, and act as so many magnets for the "Paradisias" or the "Ulysses", that magnificent butterfly of azure-blue metallic lustre, and the many other almost equally beautiful species, that flit from flower to flower among the luxuriant tropical vegetation. Members of the feathered tribe further add life and color to the gloomy forest. Screeching cockatoos and parroquets inhabit the highest treetops and strange birds, from the uncouth hornbill and the giant pigeon to the smallest humming bird, fly up at the approach of the traveller. The cassowary and bird of paradise also occur in these regions but are rarely met with.

Once again on board, the distance to Friedrich Wilhelmshafen is covered in a few hours, several wooded islets being passed en route.

FRIEDRICH WILHELMSHAFEN.

Friedrich Wilhelmshafen is the seat of Administration on the mainland of New Guinea, as well as the headquarters of the New Guinea Company, who has here its principal plantation (Jomba). The settlement lies on the north side of the Shering Peninsula in the Astrolabe Bay, on the shores

of one of the finest and most beautiful harbours New Guinea can boast of. Several islands stud the waters of the bay, thus rendering the harbour completely land-locked.

Singular as are its scenic attractions, the settlement cannot be considered among the most healthy on the island, and malaria fever is more or less prevalent at all times, especially during the rainy season (November and December) and during April and May. The total rainfall during the year 1895 was 3521 m. m., (roughly 140 inches) divided as follows:— January 352 m. m., February 418 m. m., March 349 m. m., April 488 m. m., May 421 m. m., June 130 m. m., July 51 m. m., August 23 m. m., September 123 m. m., October 296 m. m., November 251 m. m., December 619 m. m. The temperature is similar to other parts of the north coast.

The population of the settlement consists of about twenty Europeans, while Chinese and Malays, as well as the Melanesian plantation laborers, which latter predominate in numbers, form the bulk of the inhabitants.

On arrival vessels proceed up the harbour, where wharf accommodation (for one vessel at the time) is provided near the Company's stores. There is no hotel, properly speaking, but at the club-house refreshments and, if required, accommodation is procurable. A sanatorium has been erected at an altitude of about 1,000 feet on Mount Hanse-mann, some little distance to the northward, and visible from the settlement. A road has been made to the summit, which is easily accessible from Friedrich Wilhelmshafen.

Other excursions that can be made during the steamer's stay in port are tours to Jomba Plantation, by water or land, or to the islands Ragetta and Siar, where primitive native life may be studied. The natives on both these islands are a picturesque tribe, and a visit to their villages certainly forms one of the most interesting features of the whole trip. All manner of curiosities, such as weapons and ornaments, can be readily procured from the natives, the necessary articles of trade, which consist chiefly of knives, plane irons, tobacco, beads etc., being procurable at the store of the New Guinea Company at a trifling cost.

On both these islands Protestant mission stations (Rheinische Missionsgesellschaft) have been established for a number of years (the one on Siar since 1889); and the natives, though somewhat wild in their appearance, until recently were considered tractable enough; an impression also produced on the present writer, who visited the islands on several occasions. In August 1904 however, a plot to massacre the whole of the European inhabitants of Friedrich Wilhelms-

**NATIVES OF SIAR, FRIEDRICH WILHEIMSHAFEN
RETURNING FROM A FISHING EXPEDITION**

hafen was only discovered at the last moment, when, in the early dawn of morning, the attacking parties had already been stationed around the houses of the various Europeans. A number of natives were killed in the fight that ensued, and the ringleaders afterwards captured and shot.

Siar and Ragetta can be reached by boat from the steamer's moorings in less than forty minutes.

The excursion to Jomba, the principal plantation of the New Guinea Company, can easily be undertaken and will be found to be highly interesting. The distance from the settlement is little more than two miles, and the road good all the way. The most agreeable method of making this tour is to proceed to the plantation either on foot or by means of an awning-covered bullock tram, which is usually placed at the disposal of passengers by the courtesy of the Company's officials, and to return by boat. The water journey leads along a narrow and exceedingly pretty creek, fringed on both sides by dense groves of nipa palms, and overshadowed by the interlacing branches of mighty forest giants overhead.

POTSDAMHAFEN.

At Potsdamhafen, where there is a trading station of the New Guinea Company on a little island near the shore, and a Catholic mission station on the mainland, one gets closer to primitive man than has hitherto been the case. The natives there are still, to all intents and purposes children of nature, whose acquaintance with white men is of the slightest, their whole knowledge of the dominant race being confined to the few members of the mission and the trader who is stationed there.

Armed with their throwing spears, their frizzy hair decorated with bunches of feathers or ornately carved wooden combs, the young fellows of the village will follow the visitor about, feel him as if to make sure that he is a bona fide human being such as they, and make sundry signs in protestation of their friendship, which a present of a small piece of tobacco on the part of the visitor will help to strengthen still further. They are always ready to barter their ornaments or utensils for a knife or chisel, and here as in the other little frequented ports, the curio collector will be in his element.

A few miles from the Potsdamhafen the huge active volcano known as Vulcan Island raises its tapering cone to

a height of over 5,000 feet. Dense volumes of smoke are continually ejected from its crater, and at night the spectacle of the flowing lava streams and occasional outbursts of fiery stones, presents a magnificent spectacle. The island is inhabited, and trading canoes from there frequently visit the mainland.

BERLINHAFFEN.

A short day's steam to the westward of Potsdamhafen (270 miles) lies Berlinhafen, one of the most interesting spots visited by the steamer on the New Guinea coast, and one where the Papuan may still be seen in his most primitive state. The headquarters of the Catholic "Mission of the Word of God" as well as a trading station of the New Guinea Co. are situated on small islands in the bay, but on the mainland, if a small sub-station of the mission be excepted, no permanent settlement has as yet been effected.

The trading station is established on Seleo, a low coral island thickly overgrown with bush and coconut groves, and lying on the edge of the reef which encloses the bay, some five miles from the mainland.

Tumleo, or Tamara, the beautiful little island on which the mission is located, lies in 142 25" E. long. and 3 15" S. lat., at a distance of about three miles from shore, and 60 miles from the Dutch territory. Comprising about 150 acres in area, the island is low, with exception of on its northern end, where a small hillock, the Sol Jaliu, i. e. "mountain on the sea", attains a height of 262 feet.

On arrival at the anchorage the ship is immediately surrounded by a swarm of native canoes, their occupants all eager to find a market for their weapons and similar curiosities, and to exchange them for iron tools, or for money, which in recent times is even preferred. The natives of Tumleo, besides being noted for their skill in the potter's art, are skillful carvers, and their various weapons and household implements are usually embellished with most ornamental scroll work; some of the designs being most artistic in their conception and execution. The natives here as in Potsdamhafen are all that fancy painted them, at any rate as regards their outward appearance. They all affect the big mops of woolly hair characteristic to the Papuan, some bone or shell ornaments or a few bunches of birds' plumage and strips of bark cloth constituting their sole costume.

On the sandy beach of Tumleo huge sailing canoes, ornamented with shells and tufts of fibre, can be seen, especially in the trading season, when the mainland tribes visit the island for the purpose of exchanging their commodities, such as sago and other foods, for the earthenware cooking pots, for the manufacture of which the islanders seem to have the monopoly.

Of special interest in the villages themselves are the remarkable "Tamorans", or ghost houses, which contain human skulls, and which, with their pointed gables, present a most picturesque appearance. The exterior of these curiously shaped structures is covered with painted bark fringed with grassy fibre, and further embellished with snake and iguana skins and the skulls of various animals.

Other islands of the Archipelago are no less interesting than the ports briefly touched upon above, both from an ethnological and scenic point of view, and the traveller desirous of coming into contact with races that have not yet emerged from the stone age, and to observe the many other interesting phases of primitive South Sea Island life, has a wide range before him to choose from, and, whether as his objective he chooses New Ireland or the Northern Solomons, the Admiralties, the Hermits, or any one of the many solitary islands that are scattered over the New Guinea Sea, he will have ample opportunity to feast his eyes on scenery of unsurpassed beauty, and to study the unadulterated savage in his native simplicity.



INDEX.

- Aborigines of Australia, 15-24
 - New Guinea, 446-8, 464, 466-9, 484
- Adelaide, 119-182
 - Distance from Melbourne by sea, 120
 - by rail to Brisbane, 197
 - Excursions from, 130-2
- Agricultural Colleges, 82, 116, 145, 246, 410
- Agriculture,
 - Commonwealth, 60-2
 - German New Guinea, 455-8
 - New South Wales, 191-2
 - New Zealand, 347-8
 - Queensland, 244-6
 - South Australia, 115-6
 - Tasmania, 284-6
 - Victoria, 143-5
 - Western Australia, 89-90
- Airey's Inlet, 170
- Akaroa, 413
- Albany, 96
- Alien (colored) Immigration Restriction Act, 9, 43
- Alps, Australian, 1-2, 135, 179-80
 - New Zealand, 413-5, 422-31, 354
- Anderson's Inlet, 171
- Anglesea, 171
- Aratiatia Rapids, 389
- Arawa Tribe, Massacre of the, 380, 329
- Area, British New Guinea, 432
- Area and Boundaries,
 - Commonwealth, 1, 10
 - German New Guinea, 441-2
 - New South Wales, 178-9
 - New Zealand, 315
 - Queensland, 231-2
 - South Australia, 106-7
 - Tasmania, 273
 - Victoria, 134-5
 - Western Australia, 74-6
- Arltunga Goldfield, 114
- Arrowtown, 424
- Artillery Force, Royal Australian, 54
- Art and Literature, 65-6
 - Art Galleries, 101, 127, 162-3, 210, 263, 298-9, 369
 - Art Societies, 127, 163, 209, 263, 412, 420
- Ashburton Goldfield, 85
- Auckland, 364-76
 - Distance from Melbourne, 365
 - Sydney, 364
 - Excursions from, 370-96
 - From Wellington to, 402-4
 - Shipping, 366
- Audley, 221
- Auxiliary Squadron, 55
- Balhanna, 131
- Ballarat, 172
- Bank Failures of 1893, 40
- Banks, (see under the different cities also under Finance).
- Barron Falls, 231
- Bathurst, 227
- Bass, Discoveries of, 27
- Batman, 152
- Bayley's Reward, 86-7
- Beaconsfield, 313
- Beehives, The, 462
- Belubulah Caves, 218
- Bendigo, 172-3
- Ben Lomond, New Zealand, 424
 - Tasmania, 274
- Berlinhafen, 468-9
- Bethany, 132
- Bibliography,
 - British New Guinea, 435
 - Commonwealth, 46
 - German New Guinea, 451-2
 - New Zealand, 337-8
- Birds, Australian, 6-7
 - New Guinea, 444-5, 433
- Birth-rate, (see Population and Vital Statistics).
- Bischoff, Mount, 308, 283
- Bismarck Archipelago, 441, 460-4
- Blue Mountains, 214-218
- Blue Spur and Gabriel's Gully, 421
- Bluff, From Christchurch to, 416
 - From, to Hobart, 289
- Boiling Springs, 373-91, 413-4
- Bombala, from Eden to, 218-20
- Bondi, 223
- Books of Reference,
 - Australian Aborigines, 22
 - Commonwealth, 46
 - Maoris, 326
 - Melbourne, 154
 - New South Wales, 198
 - New Zealand, 337-8, 355
- Botany Bay, 223-4, 26
- Bougainville, 445
- Bourke, 228
- Boyd Town, 219
- Brighton, (Adelaide), 131-2
 - (Melbourne), 170
- Brisbane, 254-265
 - Distance from Sydney by sea, 254, 201

II

- Excursions from, 264-5
- British Ensign, First hoisting of, in Australia, 223
- British New Guinea, 432-40
 - Administration of, 435-6
 - Annexation of, 434
 - Boundaries of, 435
 - Communication with Australia, 437
 - Highest Mountains of, 432
 - Products of, 438-9
- Broad Arrow Goldfield, 85
- Broken Bay, 221-2
- Broken Hill, 225-6
- Broken Hill Proprietary, 226
- Brown's River Beach, 301
- Buka, 444
- Buller Gorge, 405
- Bulli Pass, 222
- Bundaberg, Distance from Brisbane to, 252
- Burdekin River, 233
- Burra Burra Mine, Discovery of, 114
- Bushrangers, Tasmanian 277-8
- Cables and Telegraphs,
 - British New Guinea, 437
 - Commonwealth, 56-7
 - New Zealand, 340-1
- Canterbury Pilgrims, 333
- Cape Raoul, 303
- Carbine, 356
- Cattle, (see also Pastoral)
 - Number of in Commonwealth, 63
 - in New Zealand, 350
- Caves, Limestone,
 - New South Wales, 216-8
 - Western Australian, 103-4
- Census, Commonwealth (1904), 10
- Charters Towers, 271, 242
- Chelsea, 371
- Chinese Immigrants, 9
- Christchurch, 406-13
 - Excursions from, 418-6
 - From, to Dunedin and the Bluff, 416
- Churches, 100, 125, 161, 172, 207, 225-7, 260-1, 266-8, 270, 296, 310, 368, 399, 411, 418-9 (see also Religion).
- Clifton Springs, 171
- Climate and Rainfall,
 - Adelaide, 120
 - Auckland, 366
 - Brisbane, 256
 - British New Guinea, 432
 - Christchurch, 408
 - Commonwealth, 1
 - Dunedin, 417
 - Finschhafen, 464
 - Friedrich Wilhelmshafen, 466
 - German New Guinea, 442
 - Hobart, 292
 - Melbourne, 153
 - New South Wales, 181
 - New Zealand, 319
 - Perth, 98-9
 - Queensland, 234-5
 - Rotorua, 377
 - South Australia, 108-9
 - Sydney, 200
 - Tasmania, 275-6
 - Victoria, 136
 - Wellington, 397
 - Western Australia, 76-7
- Coaching, Cost of, in New Zealand, 360
- Coal, see Mining, also 224-5, 227, 266
 - First exportation of, from Hunter River, 28
- Coconut Growing, 438, 455-8, 460-2, 465-7
- Coffee Growing, 245, 438, 465
- Coinage, 57
- Coin in Circulation in Australia, 57
- Commonwealth, Australian, 1-314
 - Constitution of, 46-52
 - Inauguration of, 43
- Commerce and Shipping,
 - British New Guinea, 437-8
 - German New Guinea, 454-5
 - New South Wales, 188-9
 - New Zealand, 344-5
 - Queensland, 240-1
 - South Australia, 113
 - Tasmania, 282
 - Victoria, 141-2
 - Western Australia, 82-3
- Conditions of Settlement,
 - British New Guinea, 436
 - Commonwealth, 13-5
 - New Zealand, 347-50
- Configuration, Victoria, 135-6
- Constitution of Commonwealth, 46-52
 - New South Wales, 183
 - New Zealand, 338-9
 - Queensland, 236-7
 - South Australia, 110-1
 - Tasmania, 278-9
 - Victoria, 138
 - Western Australia, 79
- Convict, First, Deportation to Australia, 26.
 - Tasmania, 277
 - Western Australia, 72
- Settlements, Tasmania, 303-4, 306-7
- Transportation, Abolishment of, 31, 229
- Coogee, 223
- Cook, Capt. James, Voyages of Discovery of, 26, 327, 434
 - First Landing of, in Australia, 223-4
 - Relics of, in Sydney Museum, 211
- Cook Islands, 315
- Cooktown Railway, 253
- Coolgardie, 84-8
 - Railway fares from Perth to, 96
- Cooma, Distance from Sydney to, 218
- Copper, 83, 114-5, 142-3, 190, 243, 283-4, 308, 346

- Cora Lynn, 314
 Cowan Creek, 221-2
 Cricket, (see Sporting).
 Croydon, 242
 Currency, British New Guinea, 437
 Commonwealth, 57
 German New Guinea, 453-4
 New Zealand, 341
 Customs Act,
 Disagreement between Federal Par-
 liament and Ocean Shipping
 Companies, 44
 Customs, British New Guinea, 436
 German New Guinea, 452
 New Zealand, 340
- Dampier, William, 26, 434, 449
 Dairying Industry, Commonwealth, 89
 New South Wales, 198
 New Zealand, 348-9
 Queensland, 248
 South Australia, 116
 Victoria, 146
 Western Australia, 89
 Darling River, 180
 Daylesford, 168-9
 Days Bay, 401
 Death Rate, (see Population and Vital
 Statistics).
 Debt, Public, (see Finance).
 Deer Stalking in New Zealand, 358-9,
 423
 Defence, Commonwealth, 54-5
 German New Guinea, 452
 New Zealand, 339-40
 Deloraine, 314
 Denison, Fort, 201
 D'Entrecasteaux, Discoveries of, in
 New Guinea, 450
 D'Entrecasteaux Channel, 274
 De Quiros, 25
 Desert, Australian, 2
 Dewarra, 453-4
 Diamonds, 143, 191
 Discovery and First Settlement of
 Australia, 24-6
 New Guinea, 449-51
 Distance by Sea,
 Adelaide-Melbourne, 120
 Auckland-Sydney, 364
 Melbourne-Sydney, 201
 Sugarloaf Point to Cape Maria
 Van Diemen, 315
 Sydney-Brisbane, 201
 Dragon's Mouth Geyser, 387
 Drought 1902, Effects of, 62, 192, 246-7
 Drought resisting vegetation, 7
 Dunedin, 416-20
 Excursions from, 420-31
 From, to Milford Sound, 425-31
 D'Urville, Dumont, Voyages of Disco-
 very of, 434, 450
- Dutch, Early, Navigators, 25-6, 449-50
 New Guinea, Formal Annexation of,
 450
 Duyfken, Voyage of Discovery of, 25
- Eaglehawk, 174
 Eaglehawk Neck, 303
 Eden, From, to Bombala, 218-20
 Education, New South Wales, 185
 New Zealand, 341
 Queensland, 237-8
 South Australia, 111
 Tasmania, 279-80
 Victoria, 138-9
 Western Australia, 79-80
 Eendracht, Voyage of the, 25
 Egmont, Mount, 395
 Emeralds, 191
 Endeavour, Voyage of Discovery of
 H. M. S., 26
 Erima, 465
 Eureka Stockade, Site of, 172
 Excursions, from Adelaide, 130-2
 Auckland, 370-96
 Brisbane, 264-7
 Christchurch, 413-6
 Dunedin, 421-31
 Hobart, 300-9
 Melbourne, 166-71
 Perth, 103-4
 Sydney, 213-24
 Wellington, 401-6
 Executive Council, The,
 of the Commonwealth, 48
 New Zealand, 338
 Exhibition, Annual, at Christchurch, 412
 Exports, (see Commerce and Shipping,
 also under the different indu-
 stries).
- Fairfax Harbour, 439-40
 Fauna and Flora,
 British New Guinea, 433
 Commonwealth, 4-8
 German New Guinea, 444-5, 465
 New Zealand, 319-21
 Federal Capital, Probable site of, 218
 Federation Movement, 40-2
 Fern Tree Bower, Hobart, 301
 Fern Tree Gully, Upper, Victoria, 167
 Finance and Trade, Commonwealth, 52
 Finance,
 British New Guinea, 437
 New South Wales, 186-7
 New Zealand, 342-3
 Queensland, 239-40
 South Australia, 112-3
 Tasmania, 281-2
 Victoria, 140-1
 Western Australia, 81-2
 Finschhafen, 464, 451

IV

- Fiords, New Zealand, 354-5, 425-31**
 Annual Excursion Trip to, 421
Fish, Hatchery, N. S. W., 220
Fishing, 167-8, 221-2, 304, 306-7, 321, 372-4, 378, 402, 414, 421, (see also Sporting).
Fitzroy River, 233
Flinders, Discoveries of, 27-8
Flora, (see Fauna and Flora).
 Alpine, 430
Flour, Export of, from South Australia, 115
Fly River, 433, 439
Freezing Works,
Fremantle, 96-7
French Colonization Designs on New Zealand, 390
Friedrich Wilhelmshafen, 465-7
Fruit Growing, (see Agriculture).
- Gap, The, 201**
Garden Island, 201
Gascoyne Goldfield, 85
Geelong, 173
Geological Evidence of an Ice Age, 132
 Observations on Jenolan Caves, 216-7
George's Bay, Tasmania, 307
German Colonists, 9, 132, 267, 300
German Possessions in the Western Pacific, 441-69
 Administration of, 452
 Annexation of, 434, 451
 Health Conditions in, 442
 Language, 448-9
 Minerals, 458
 Products of, 455-8
Geysers, 376-92
Gippsland Lakes, 168
Glaciers, New Zealand, 354
Glade House, 428-9
Glenelg, 131
Glenorchy, 423-4
Gold, Discovery of, in Australia, 34-6, 228
 Discovery, Effect of first, 35
 Discovery, Site of first, in New Zealand, 421
 Discovery of, in Western Australia, 84, 73-4
 Exports from British New Guinea, 489
Golden Mile, 87
Goldfields, Western Australia, 84-8
Gold Mining, 172-3, 271, 273, 308, 439, 440 (see also Mining).
 Site of first, in New South Wales, 228
Gold Nugget, the largest, found in Australia, 142, 211
Gonneville, Sieur de, 25, 327
Goodenough Island, 433
Goulbourn, 226-7
- Governor General, The, of the Commonwealth, 47**
Governor of New Zealand, 338
Governors of N. S. W., 183-4, (see also History).
Grafton, 228
Grape Growing, (see Agriculture).
Great Barrier Island, 372
Great Boulder Mine, 87
Great Wairakei Geyser, 387
Grey, Sir George, 332-4, 336, 33, 369
Gulden Zeepaerd, Voyage of the, 25
Gympie, 241
 Distance from Brisbane to, 252
- Hamurana, 381-2**
Hanmer Springs, 413-4
Hargraves, Edward, 34, 84
Hau Hau Rebels, 335
Hawkesbury River, 222
Healesville, 166
Health Resorts,
 New South Wales, 213-24
 New Zealand, 372-4, 376-80, 391, 413-4
Herbertshöhe, 460-2
Hermitage, The, 414-5
Hinchinbrook, 231
Hinemoa Legend, 380-1
History, The, of Australia, 27-46
 British New Guinea, 434-5
 German New Guinea, 449
 New Zealand, 327-37
 Queensland, 229-30
 Tasmania, 277-8
Hobart, 291-302
 Excursions from, 300-8
 From Melbourne to, 289
 From, to the Bluff, N. Z., 289
 From, to Launceston, 308-9
Hobson, Captain James, 330-1
Hochstetter Ice Fall, 415
Hongi's Raids, 328-9, 380
Hornsby Lighthouse, 200
Horse Breeding, 63, 90, 247, 286, 350, 356
Horse Racing, 67, 92-3, 117, 131, 147-8, 166, 194, 249-50, 287, 356, 412
- Hotels,**
 Commonwealth, 68-9
 New Zealand, 361-2, (see also under the different cities).
Hot Springs of New Zealand, 373-91, 413-4
 Bethany, S. A., 132
 Gazelle Peninsula, 463
Huka Fall and Cataract, 389-91
Hunter River, Discovery of, 28
Hutt Valley, 402
- Immigration, Encouragement of, 8, 13-5**
Imports, (see Commerce and Shipping).
Infantry, Australian Mounted, 54
Ipswich, 265-6
Iron, (see Mining).

- Jamieson, 171
 Jarrah Forests, 91
 Jave la Grande, 25
 Jenolan Caves, 216-8
 Jomba Plantation, 466
 Judicature, The, of the Commonwealth, 52-8.

 Kabakon, Neu Lauenburg, 462
 Kaiserin Augusta River, 448
 Kaiser Wilhelms Land, 441, 464-9
 Kalgoorlie, 85-8
 Railway Fares from Perth to, 96
 Kamo, 372
 Kanowna, 85-7
 Kapunda Mine, Discovery of, 114
 Karapiti Blow Hole, 389
 Katoomba Falls, 216
 Katoomba, From Sydney to, 215
 Kauri Forests, The nearest, to Auckland, 371
 Gum, 346
 Tree, Largest known, 372
 Kelly Basin, 307
 Kermadec Islands, 315
 Kimberley, 85
 King River, 307
 Kingston, 422
 Kuring-gai Chase, 221
 Kurrajongs, The, 222.

 La Perouse, 224
 Labour Conditions, Commonwealth, 13
 Lady Robinson's Beach, 224
 Lake Cooper, 171
 Lake District Tasmania, 304-6
 Lake Echo, 305
 Lake, Great, 306
 Lakes, New Zealand, 317-8
 Lakes Sorrel and Crescent, 305
 Lake St. Clair, 304-5
 Lake Tarawera, 317, 384
 Lake Taupo, 392
 Lake View Consols, 87
 Lake Waikaremoana, 393, 317
 Land, Cost of, in German New Guinea, 456
 Land Legislation,
 British New Guinea, 436
 Commonwealth, 13-5
 New Zealand, 347-50
 Largs Bay, 121
 Launceston, 309-11
 Excursions from, 312-4
 From, to Hobart, 308-9
 Lead, (see also Mining), 226
 Leeuwin, Voyage of the, 25
 Legislature, Federal, 48-50
 New Zealand, 338-9
 Libraries, 102, 128, 163, 211-2, 263, 299, 369, 400, 412, 420, 46
 Library, Sydney Free Public, 46
 Literature and Art, 65-6

 Living in Australia, 11-12
 London Mission Society, First Establishment of, in New Guinea, 450
 Lord Howe Island, 179
 Lorne, 171

 Macquarie, Governor, 29-30
 Lighthouse, 200
 Mail Service, Oversea, 55-6
 Mallee Scrub, 7
 Maitland, 227
 Maize (see Agriculture).
 Manapouri, Lake, 426-7
 Manly, 223
 Manufactures,
 Commonwealth, 64-5
 New South Wales, 143-4
 New Zealand, 351-2
 Queensland, 248-9
 South Australia, 113-4
 Tasmania, 266-7
 Victoria, 147
 Western Australia, 91-2
 Manukau Harbour, 365
 Maori Language, 326
 Maoris, The, 323-6
 Maori Point, 424
 Maori Wars, 329, 331-2, 334-5
 Margaret River Caves, 103-4
 Maria Island, 306-7
 Marine Products, British New Guinea, 439
 German New Guinea, 458
 Marlborough Sounds, 402
 Marquis de la Ray Expedition, 451
 Marsupials, 4-5, 433, 445
 Maryborough,
 Distance from Brisbane, 252
 Marysville, 171
 Matupi, 463-4
 McIlwraith's, Sir Thomas, Proposal of Annexation of New Guinea, 434
 Melbourne, 152-71
 Cup, 147-8, 68
 Distance by sea,
 From Adelaide and Sydney, 154
 From Auckland 365
 Excursions from, 166-71
 From, to Ballarat, 172
 Bendigo, 172-3
 Eaglehawk, 173-4
 Geelong, 173-4
 Sydney, 151
 Warrnambool, 174
 Meneses, Jorge, Voyage of, 449
 Micklucho-Maclay, 450, 448
 Milford Sound, 428-31
 Military Forces,
 Commonwealth, 54-5
 New Zealand, 339-40
 Mining, British New Guinea, 439
 Commonwealth, 59-60
 New South Wales, 189-91, 224-6
 New Zealand, 345-7, 373, 421, 424

VI

- Queensland, 241-4, 266, 271
- South Australia, 114-5
- Tasmania, 282-4, 307-8
- Victoria, 142-3, 172-3
- Western Australia, 83-8
- Mints, 159, 205, 100
- Output of, during 1903, 57
- Mioko, Neu Lauenburg, 462
- Missions, British New Guinea, 438
- German New Guinea, 454
- Mitre Peak, 431
- M'Kinnons Pass, 430
- Mokoia, 380-1
- Monaro Plateau, 218-20
- Moresby, Captain, Discoveries of, 450
- Moresby, Port, 439-40
- Morioris, 323
- Mount Balloon, 429-30
- Mount Balby, 444
- Mount Bartle Frere, 232
- Mount Bischoff, 283, 308
- Mount Cook, 317, 414-5
- Mount Double Cone, 317
- Mount Earnslaw, 317
- Mount Eden, Auckland, 370
- Mount Egmont, 317, 395
- Mount Gambier, 171
- Mount Hansemann, 466
- Mount Kosciusko, 1, 220
- Mount Lofty, 131
- Mount Margaret Goldfield, 85
- Mount Morgan, 241-2, 39, 268
- Mount Nelson, Tasmania, 301
- Mount Tarawera, 316, 384
- Mount Townsend, 1
- Mount Victoria, B. New Guinea, 432
- Mount Victoria, Wellington, 403
- Mount Wellington, Hobart, 301-2
- Murchison, 84-5
- Murray River, 107, 135, 180
- Museums, 101, 128, 163-4, 210-1, 263, 298, 369, 400, 412, 420.
- Napier, 392-3
- National Park, Sydney, 220-1
- Adelaide, 131
- Naval Defence, Australian, 54-5
- New Zealand, 340
- Neu Lauenburg, 462
- Newcastle, 224-5
- New Guinea, 432-69
- Distance from Australia, 432
- Discovery of, 449
- New Guinea Company, German, 451, 455, 459, 461, 464-8
- New Holland, 26
- New Norfolk, 302
- Newport, 222-3
- Newspapers, (see under the various towns).
- New South Wales, 175-228
- Proclamation of, as British colony, 28
- New Zealand, 315-431
- Colonization of, 329-30
- Proclamation of, as independent colony, 331
- Proclamation as British colony 330
- Nihotapu Falls, 371
- Norddeutscher Lloyd, Inter-Island Line (New Guinea), 459
- Depot at Simpsonhafen, 462
- Norfolk Island, 179
- Nortons Summit, 131
- Ocean Grove and Barwon Heads, 171
- Ocean Mail Service, 55-6
- Occupation of the People, Commonwealth, 12-3
- Ohinemutu, 378-9
- Okere Falls, 383
- Okoroire, 374
- Onkaparinga Races, 131
- Oodnadatta, 114
- Opal, 191, 243, 347
- Orakau Pah, Capture of, 335
- Orakei-Korako, 389
- Orange, 228
- Orchards, see Agriculture
- Otago Harbour, 417
- Otira Gorge, 405-6
- Owen Stanley, Capt., Discoveries of, 434
- Owen Stanley Range, 432
- Pacific Island Laborers Bill, 43
- Pambula, 219
- Papuas, 446-8
- Parliament, Commonwealth, 47-52
- New Zealand, 338-9
- Pastoral, Commonwealth, 62-4
- New South Wales, 192-3
- New Zealand, 349-51
- Queensland, 246-7
- South Australia, 116-7
- Tasmania, 286
- Victoria, 145-6
- Western Australia, 90
- Paulmyer, Bynot, Discoveries of, 25
- Peakhill, 85
- Pearling Industry, British New Guinea, 439
- German New Guinea, 458
- Penal Settlements, Old, in Tasmania, 303-4-7
- Perth, 97-104
- Excursions from, 103-4
- From, to Albany, Coolgardie, Fremantle, Kalgoorlie, 96
- Peterborough, 171
- Phillip, Governor, 28
- Phormium, 321, 344

Physical Features

- British New Guinea, 432-3
- Commonwealth, 1-3
- German New Guinea, 443-4
- New South Wales, 179-80
- New Zealand, 316-9
- Queensland, 232-3
- South Australia, 107-8
- Tasmania, 274-5
- Victoria, 135-6
- Western Australia, 74-6

Pilbarra Goldfields, 84-6

Pink and White Terraces, Destruction of, 816

Population,

- British New Guinea, 433-4
- Commonwealth, 8-10
- Average per sq. mile, 10
- German New Guinea, 446

Population and Vital Statistics

- New South Wales, 182
- New Zealand, 321-3
- Queensland, 235-6
- South Australia, 109-10
- Tasmania, 276-7
- Victoria, 136-7

Western Australia, 77-9, (see also under the different cities).

Port Arlington, 169

Port Arthur, 304

Port Campbell, 171

Port Chalmers, 417

Port Fitzroy, 372

Port Hacking, 221

Port Jackson, 200-1

Port Moresby, 439-40

Port Nicholson, 296-7

Port Phillip, 154

Settlement of, 33, 152

Discovery of, 26

Port Pirie Smelting Works, 114, 226

Postal and Telegraphic

- British New Guinea, 436-7
- Commonwealth, 55-7
- German New Guinea, 452-3
- New Zealand, 340-1
- Tasmania, 279

Potsdamhafen, 467-8

Press, (see under the different cities).

Prime Minister, First, of Commonwealth, 43

Prinetown, 171

Prisons, New South Wales, 196

Purari River, 433

Quarantine,

- New South Wales, 184-5
- New Zealand, 342

Queenscliff, 169

Queensland, 229-71

Excursion along North Coast of, 230-1

Queenstown, New Zealand, 423

Quiros, Fernandez de, 25

Ragetta, 466-7

Railways

- Commonwealth, 69-71
- New South Wales, 196-8
- New Zealand, 362-4
- Queensland, 251-4
- South Australia, 118-9
- Tasmania, 290-1
- Victoria, 149-52
- Western Australia, 94-6

Railway Fares, Commonwealth, 71

Between Melbourne and Sydney, 71

New Zealand, 363-4, 353 (Hanmer)

Reduced, to Oversea Passengers, 71, 151

Western Australia, 96

Journey, the longest possible in Australia, 251

Rainfall, (see Climate and Rainfall).

Ralum Plantation, 451, 455, 460-1

Ramu River, 443.

Religion

- British New Guinea, 438
- Commonwealth,
- German New Guinea, 454
- New South Wales, 186
- New Zealand, 341-2
- Queensland, 238-9
- South Australia, 111-2
- Tasmania, 280-1
- Victoria, 140
- Western Australia, 80-1

Remarkables, The, 422

Reptiles, 5-6, 433, 445

Restaurants, 69, (see also under different cities).

Revenue, (see Finance).

Ritter Island, Eruption of, 444

Rockhampton, 268-9

Roebuck, Voyage of Exploration of S. M. S., 26, 449

Rotoehu, 382

Rotoiti, 382

Rotoma, 382

Rotorua, 376-85

From Auckland to, 374-6

Ruapehu, 392, 316

Rubber, Export of, From British New Guinea, 438-9

Planting in German New Guinea, 455

Saavedra, Visit of, to New Guinea, 449

Samarai, 440

Sandgate, 264

Sandringham Line, Brighton and, 170

Sattelberg, 443

Savings Banks, (see Finance).

Schools, (see Education).

Senate, The, of Commonwealth, 48-9

Seppeltsfield, 132

VIII

- Settlement, Conditions of,
 - in Commonwealth, 13
 - in New Zealand, 347-50
 - in Western Australia, 90
- First, in Australia, 26
- First permanent, in New Zealand, 329-30
- Settlers, Advances to, 62
 - First, in Otago, 333, 407
- Sheep, (see Pastoral).
 - Number of, in Commonwealth, 62-3
- Shipping, (see also Commerce and Shipping)
 - Auckland, 366
 - Newcastle, 225
 - Sydney, 200
 - Wellington, 397-8
- Facilities, Adelaide, 121
 - Auckland, 366
 - Brisbane, 256-7
 - Fremantle, 96-7
 - Geelong, 173
 - Hobart, 291, 294
 - Launceston, 309
 - Lyttelton, 409
 - Melbourne, 154
 - Newcastle, 224
 - Otago Harbour, 417
 - Rockhampton, 268
 - Sydney, 200-1
 - Townsville, 269
 - Wellington, 397-8
- Shooting, (see also Sporting), 167-8, 220, 304, 306-7, 413-4, 421, 426
- Shops, New Zealand, 352
- Shouten, Discovery of New Guinea Archipelago by, and Le Maire, 449
- Siar, 466-7
- Silver, 225-6, 308
 - (see also Mining).
- Simpsonhafen, 462
- Smith Sound, 427
- Solomon Islands, German, 442, 444
- Sorrento, 169
- South African War, Dispatch of Australian Troops to, 45-6
- South Australia, 105-32
 - Site of Proclamation of, as British Province, 131
- Southern Lakes, New Zealand, 421-8
- South Sea Island Labor,
 - Abolition of, 245
- South Sea Islands under New Zealand Administration, 315
- Specimen Tours from Auckland, 374-6
- Sport and Amusement,
 - Commonwealth, 66-8
- Sporting
 - German New Guinea, 458-9
 - New South Wales, 194-5
 - New Zealand, 356-9
 - Queensland, 249-51
 - South Australia, 117-8
 - Tasmania, 287-9
 - Victoria, 147-9
 - Western Australia, 92-4
- States, The, of the Commonwealth, 53
- Stephansort, 465
- Stewart Island, 315, 421
- St. Heliers, New Zealand, 371
- Sugar, Growing of, in Queensland, 244-5
 - Production of, in Australia, 61
- Sutherland Falls, 430
- Swansea, 306
- Sydney, 199-224
 - Communication between Hobart and, 289-90
 - Distance from Auckland, 364
 - Bathurst, 227
 - Bourke, 228
 - Brisbane (by sea), 201
 - Broken Hill, 225
 - Goulburn, 226
 - Grafton, 228
 - Maitland, 227
 - Melbourne (by sea), 201
 - Newcastle, 224
 - Orange, 228
 - Excursions from, 213-24
 - Shipping, 200
- Takapuna Lake, 371
- Tamara, 468-9
- Tanunda, 132
- Tarawera Lake, 317, 384
- Tarawera, Mount, Eruption of, 316
- Tasman, Abel Janszoon, Voyage of
 - Discovery of, 25-6, 327
- Tasman Glacier, 354, 415
- Tasmania, 272-314
 - East Coast of, 306-7
 - West Coast of, 307-9
- Tasmanian Race, The last Representatives of, 16
- Tasman's Peninsula, 303-4
- Taupo, 391-2
- Tautawanglo Mountain, 219
- Te Anau, Lake, 427-8
- Te Aroha, 372-3
- Teekapoona, 307
- Telegraphs, Commonwealth, 53-7
 - New Zealand, 340-1
- Temperature, (see Climate)
 - Highest, recorded in 1906, 136
- Testu, Guillaume le, 25
- Thames, 373
- Tikitere, 382
- Timber,
 - British New Guinea, 438-9
 - German New Guinea, 458
 - Western Australia, 91
- Tin, 308, 283, 115, 143, 190, 243, 283-4
- Tin Mine, The principal in Australia, 308, 283

- Titirangi Ranges, 371
 Tobacco Growing, Australia, 61
 German New Guinea, 455, 465
 Toowoomba, 266-7
 Toma, Gazelle Peninsula, 461-2
 Tongariro, 392, 316
 Torquay, 171
 Torres, Luis Vaez de, Discoveries of,
 25, 449
 Tourist and Climatic Resorts, N. S. W.,
 213
 Tourist Department, Government,
 New Zealand, 352-5
 Tours, New Zealand, 352-5
 Townsville, 269-70
 Trade and Commerce,
 Commonwealth, 57-9
 Trans-continental Railway, Projects for
 construction of, 119
 Trout Fishing, 168, 356-7, 424
 Trout, The largest, caught in New
 Zealand, 357
 Trade, (see Commerce and Shipping)
 Travelling and External Communication,
 British New Guinea, 437
 German New Guinea, 459-60
 New Zealand, 360-1
 Tasmania, 289-90
 Tuatea Falls, 383
 Tuhuatahi Geyser, 387
 Tumleo, 468-9

 Universities, (see Education, also under
 the different cities).

 Van Diemen's Land, History of, 227
 Varzin Mountain, 461-2
 Vegetation, Indigenous,
 Australian, 7-8
 New Guinea, 444-5, 433
 New Zealand, 321
 Victoria, 133-74
 Vine Districts, The, of South Australia,
 132
 Vine Growing, (see Agriculture).
 Volcanic Eruptions,
 Bismarck Archipelago, 444
 New Zealand, 316
 Volcanoes, 316-7, 443-4, 462, 463-4, 467-8
 Vulcan Island, 443-4, 467-8

 Waihi Mine, New Zealand, 373
 Output of, 345
 Waikaremoana, 393
 Waimangu, Geyser, 383-4
 Round Trip, 384
 Wainuimata, 402

 Waiotapu, 386
 From Rotorua to, 385-6
 Wairakei, 386-7
 Wairoa Valley, 389
 Wairua Fall, 372
 Waitakerei Falls, 371
 Waitangi, Treaty of, 330
 Waitemate Harbour, 365
 Waitomo Caves, 375
 Waiwera, Hot Springs, 373-4
 Wakatipu, Lake, 422
 Wakefield, Edward Gibbon, 32-3, 105,
 119, 329, 333
 Wanaka, Lake, 425
 From, to Mount Cook, 425
 Wanganui River, 394-5
 Wanneroo Caves, 104
 Warrnambool, 174
 Warumbul, 221
 Water Scheme, West Australian, 88
 Watsons Bay, 223, 201
 "Welcome Stranger", 211
 Wellington, 396-401
 Excursions from, 402-6
 From, to Auckland, 402-4
 From, to Christchurch, 404-6
 Shipping, 397-8
 Western Australia, 72-104
 Whakarewarewa, 379-80
 Whaling Industry, 219
 Wheat, (see Agriculture).
 White Australia Policy, 43
 White Cliffs, 191
 White Labour, Sugar Growing with,
 245
 Wine, Australian, (see Agriculture).
 Production of in Australia, 61
 Wiremu Kingi, 334
 Wombeyan Caves, 218
 Wool, Production of, Commonwealth, 63
 New South Wales, 192
 New Zealand, 350-1
 Queensland, 247
 South Australia, 117
 Tasmania (Export of), 282
 Victoria, 145-6
 Western Australia, 91

 Yalgoo Goldfield, 85
 Yallingup Caves, 103
 Yan Yean, 167
 Yarrangobilly Caves, 218
 Yilgarn, 85
 Ynigo Oritz de Retes, Voyage of, to
 New Guinea, 449

 Zeehan, 307-8
 Zink, 226.
-

Carl Schünemann, Bremen.

